Hue	RGB mode	Color Range
0°~60°	R ≧ G and G >B	Red to Yellow
60°~120°	G ≧ R and R >B	Yellow to Green
120°~180°	G ≧ B and B >R	Green to Cyan
180°~240°	B ≧ G and G >R	Cyan to Blue
240°~300°	B ≧ R and R >G	Blue to Magenta
300°~360°	R ≧ B and B >G	Magenta to Red

Fig. 1 Prior Art

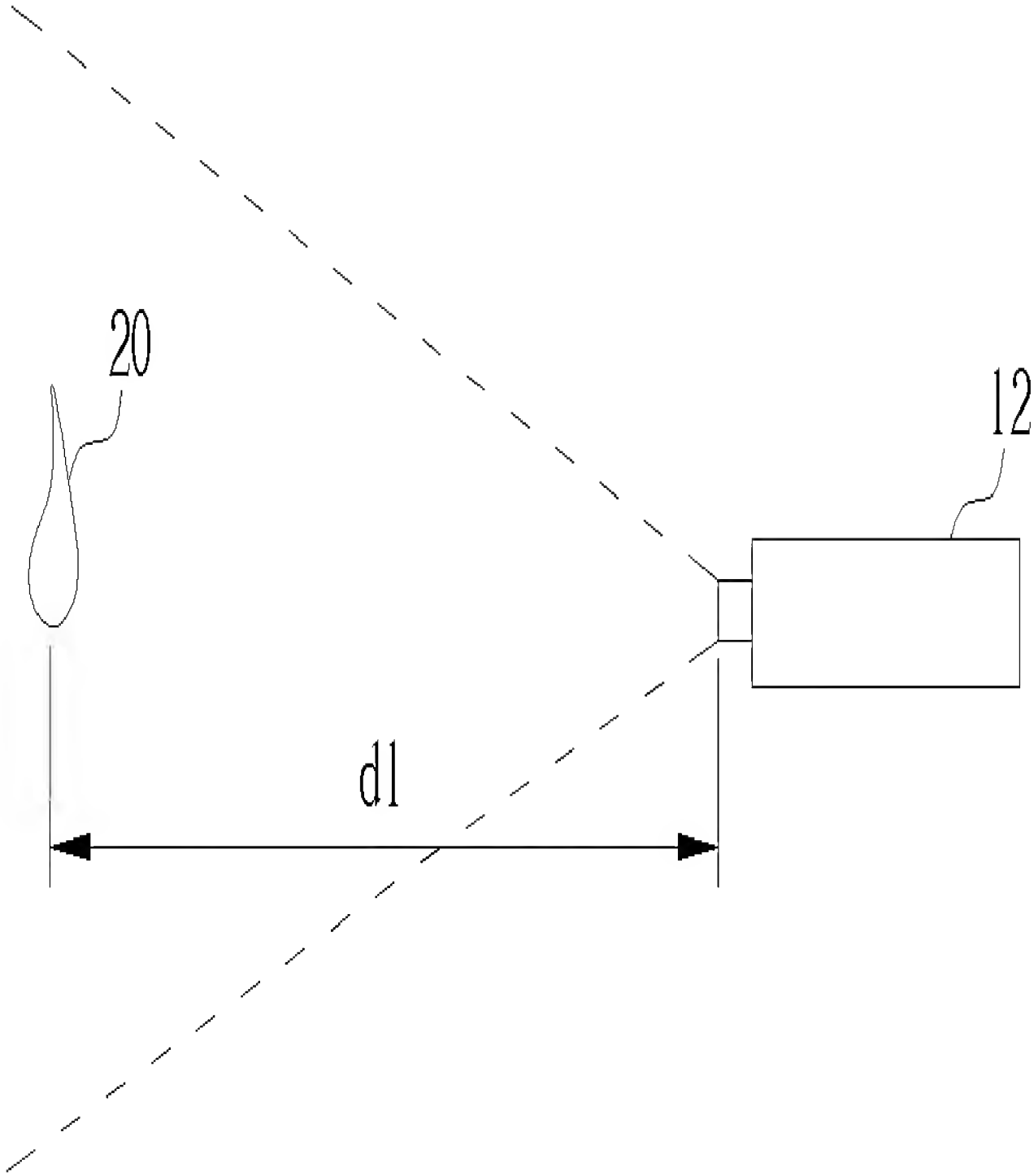

Fig. 2 Prior Art

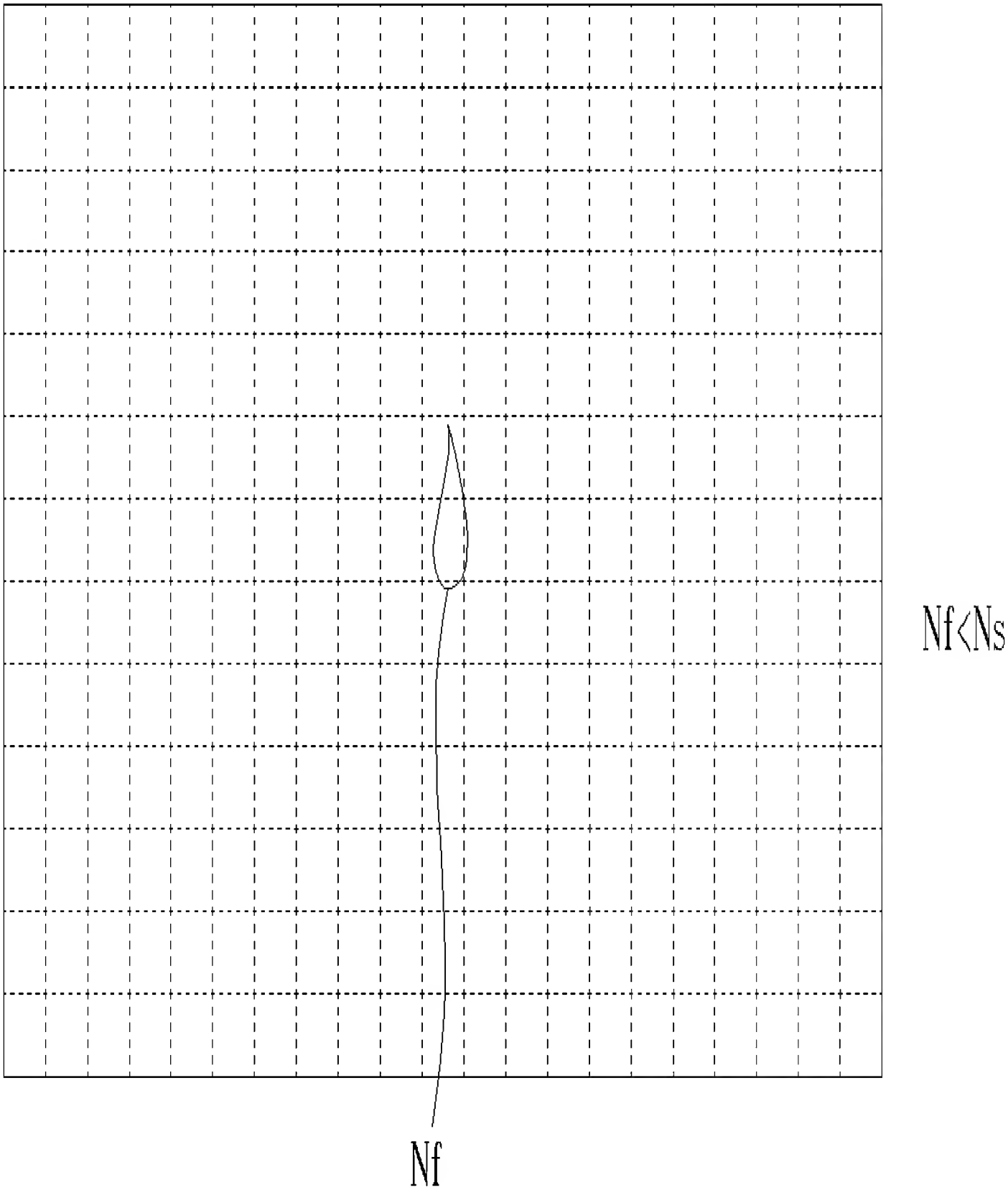

Fig. 3 Prior Art

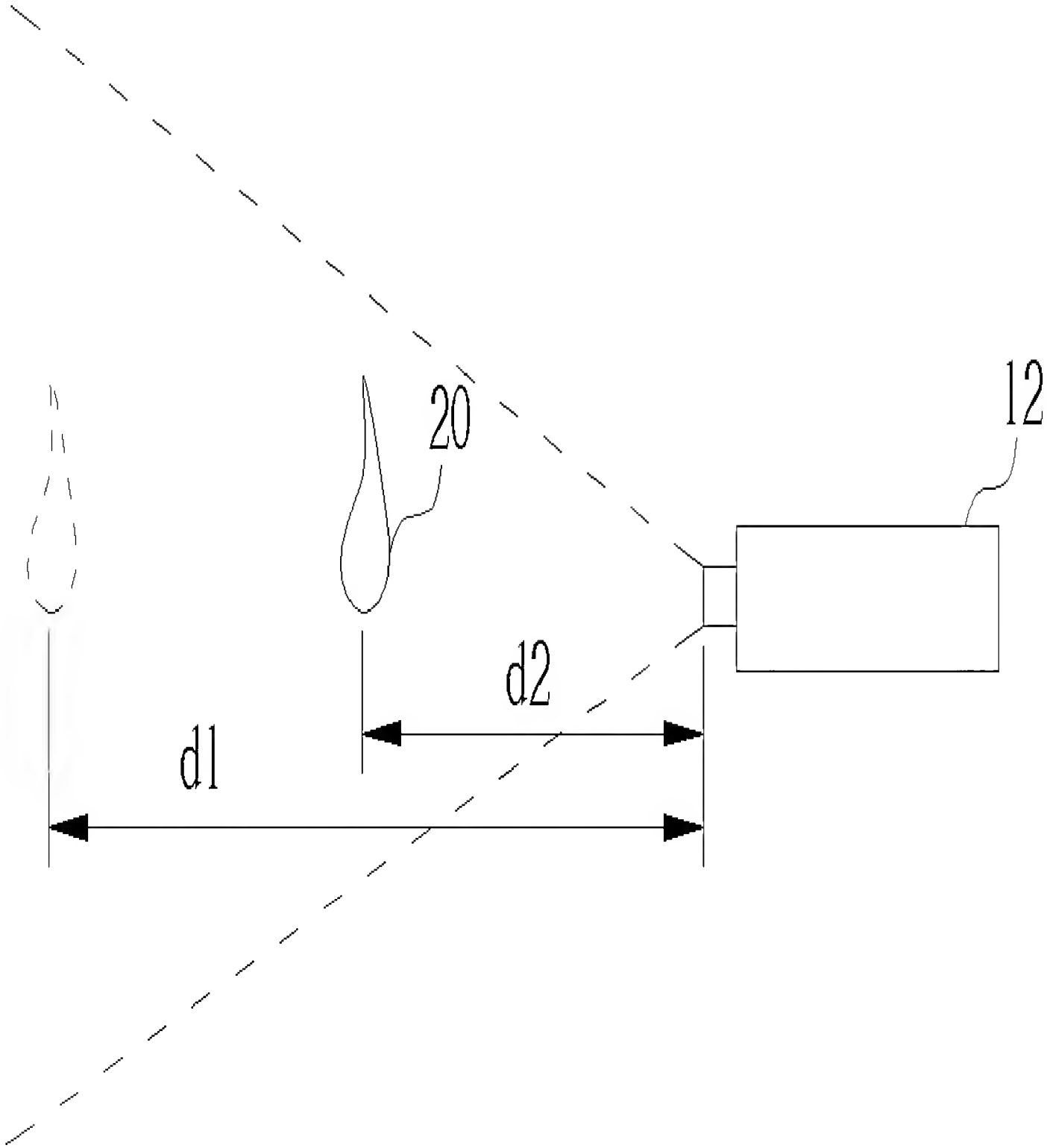

Fig. 4 Prior Art

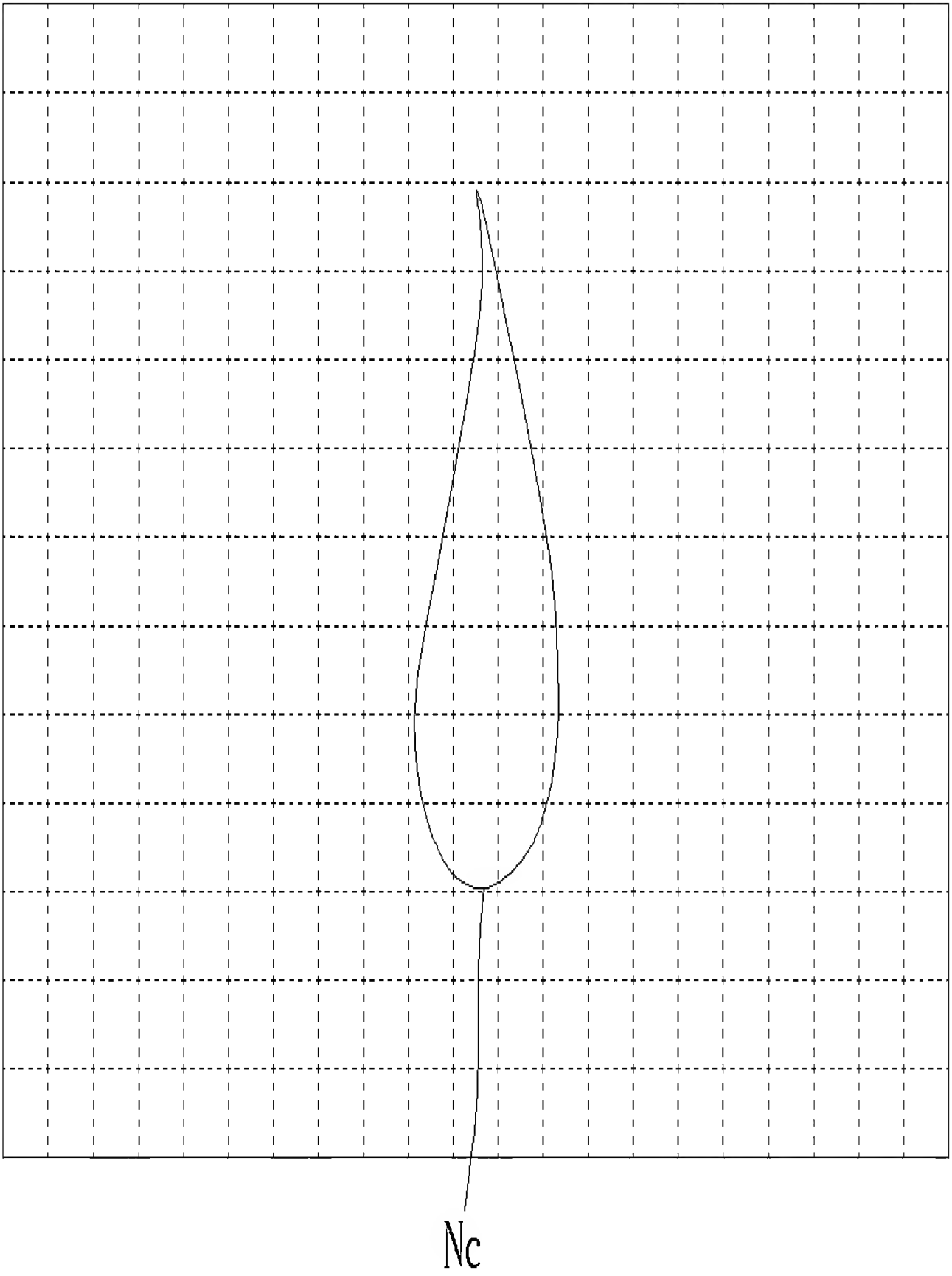

Fig. 5 Prior Art

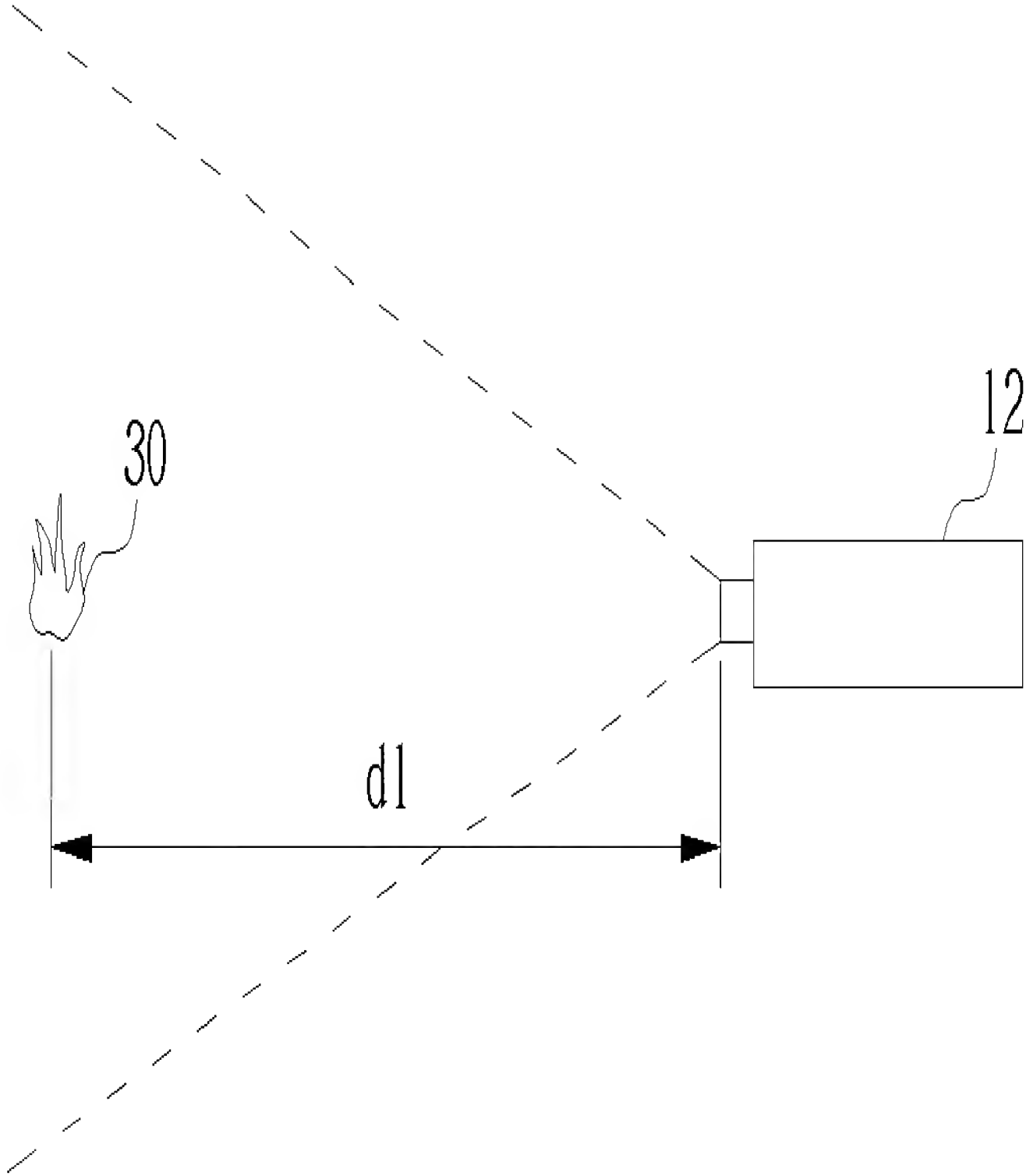

Fig. 6 Prior Art

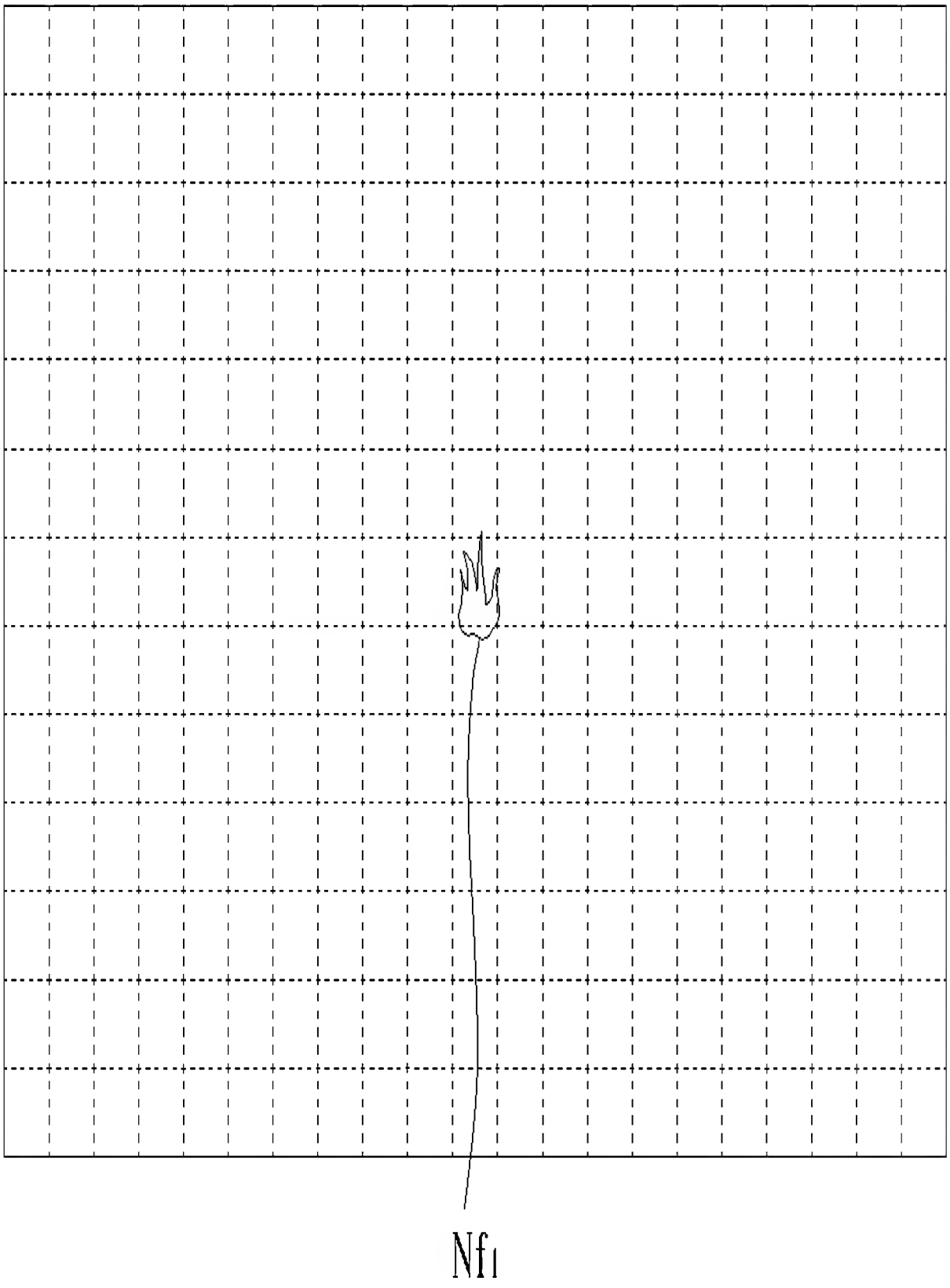

Fig. 7 Prior Art

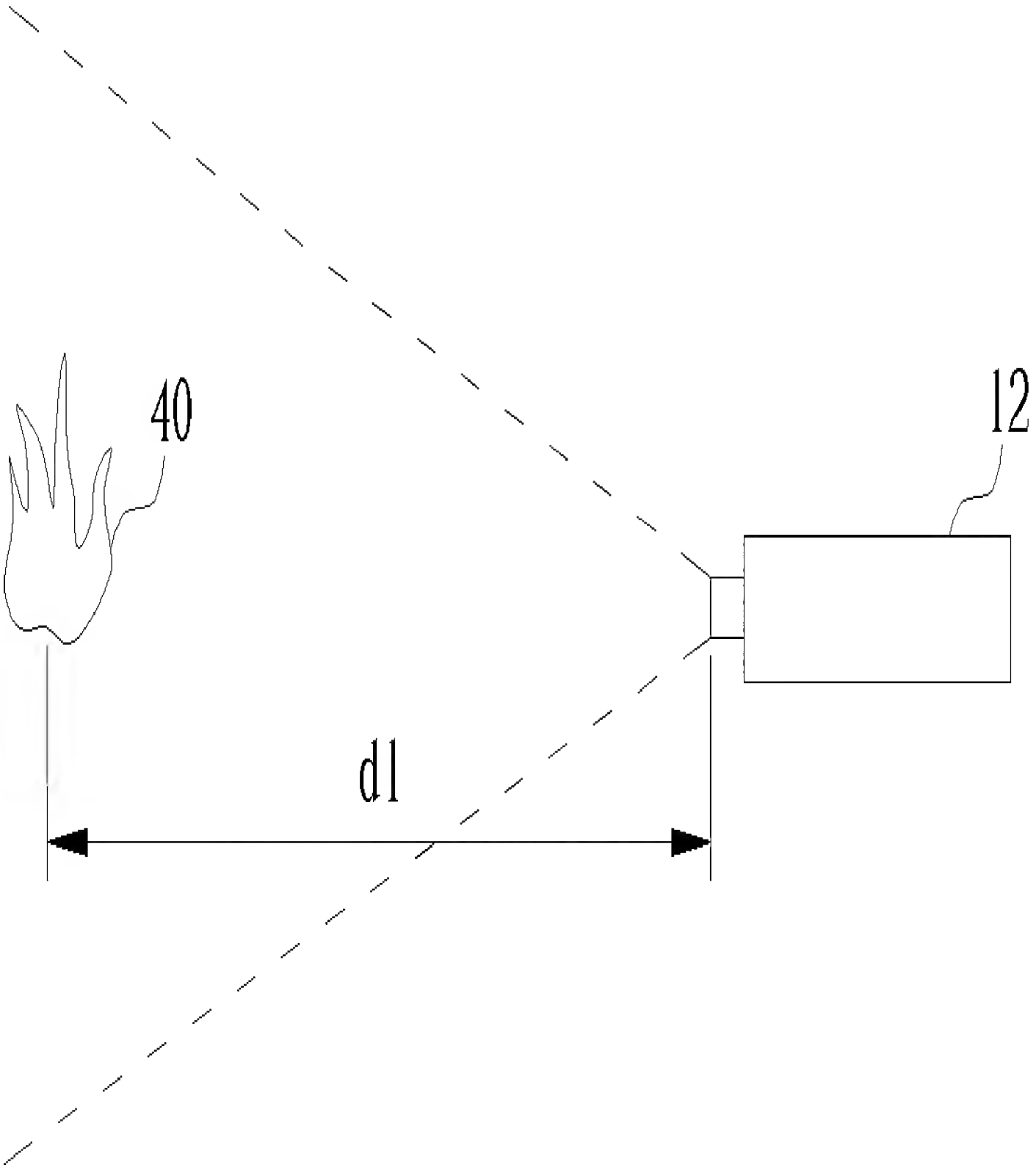

Fig. 8 Prior Art

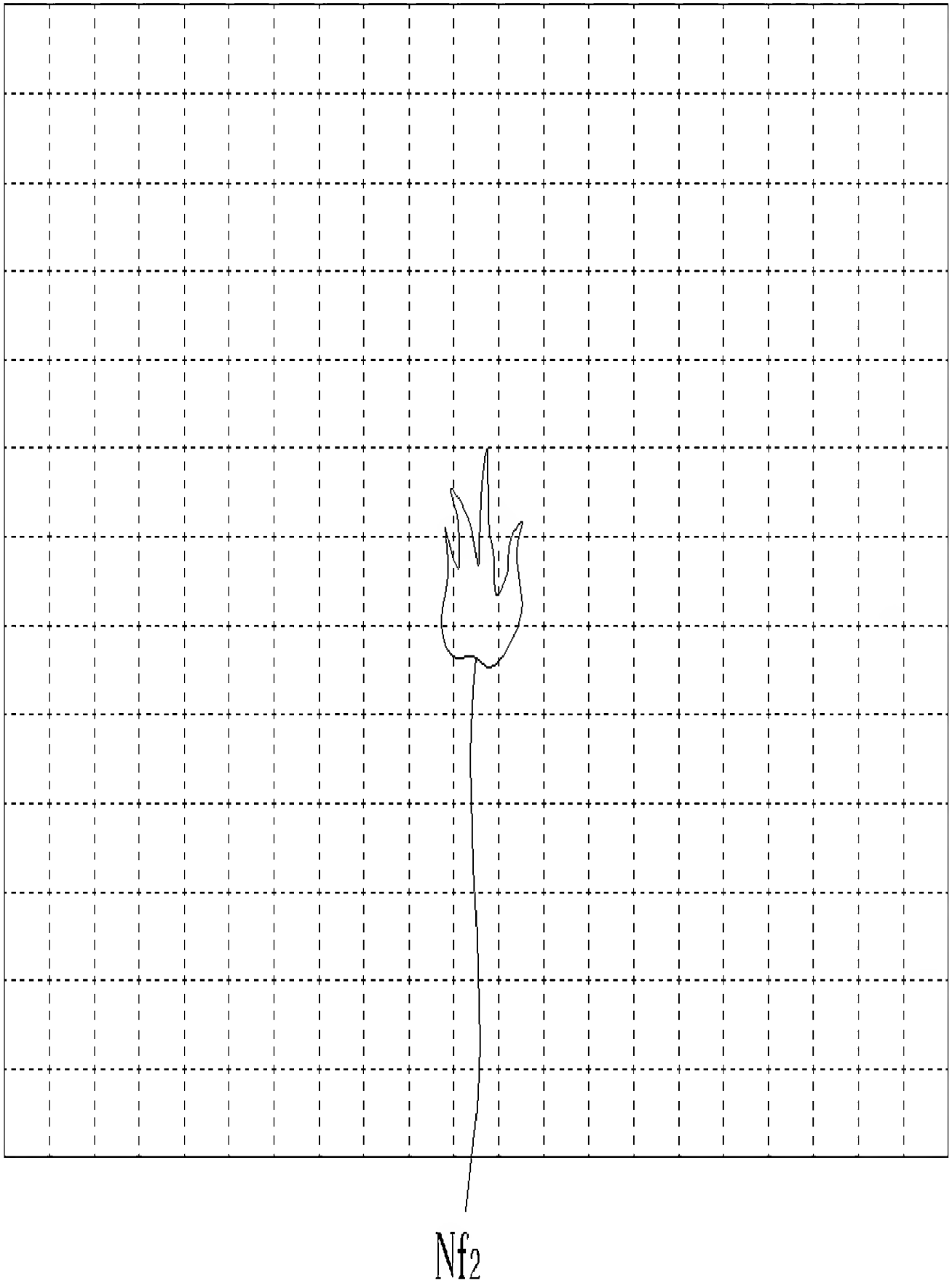

Fig. 9 Prior Art

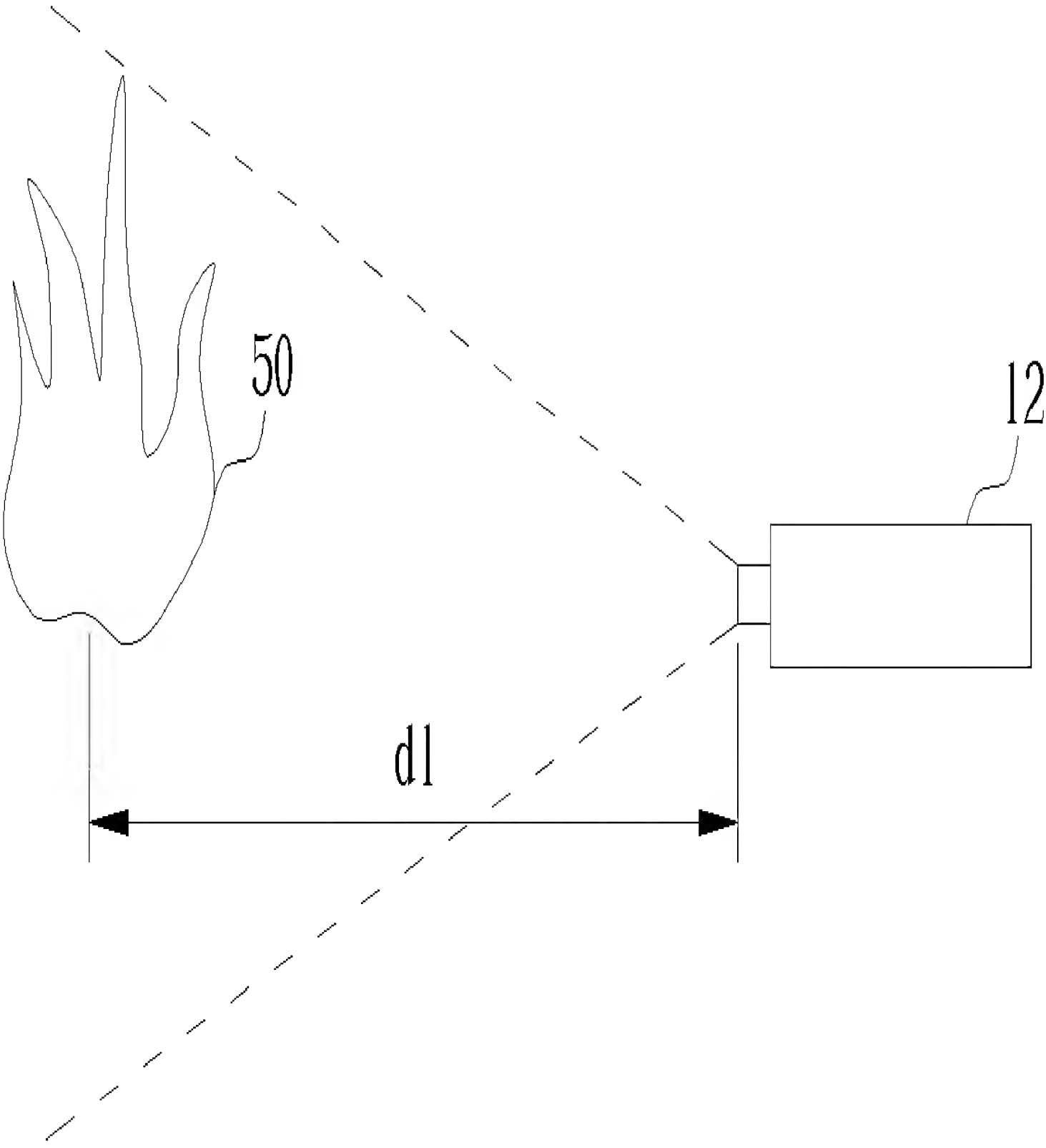

Fig. 10 Prior Art

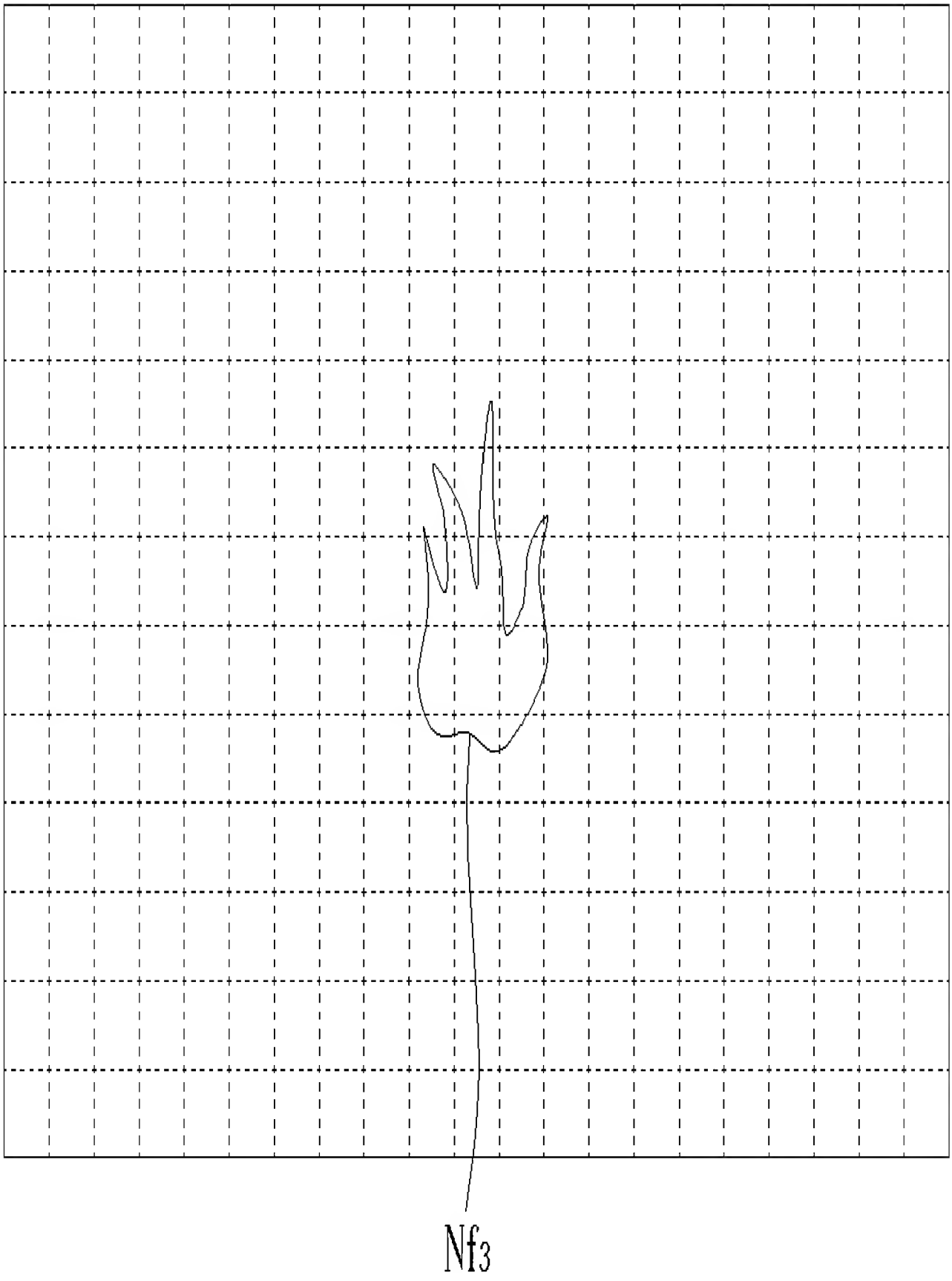

Fig. 11 Prior Art

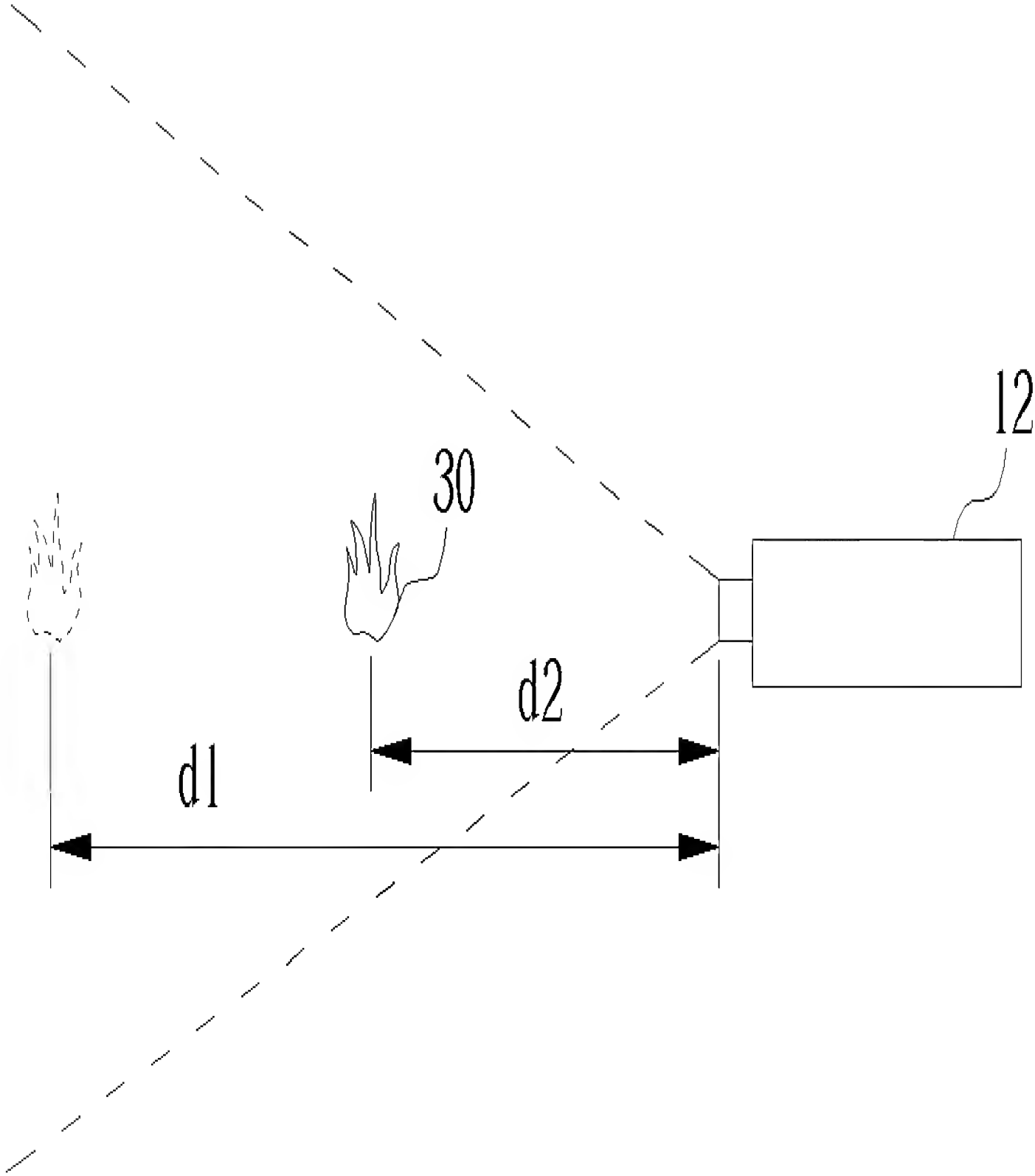

Fig. 12 Prior Art

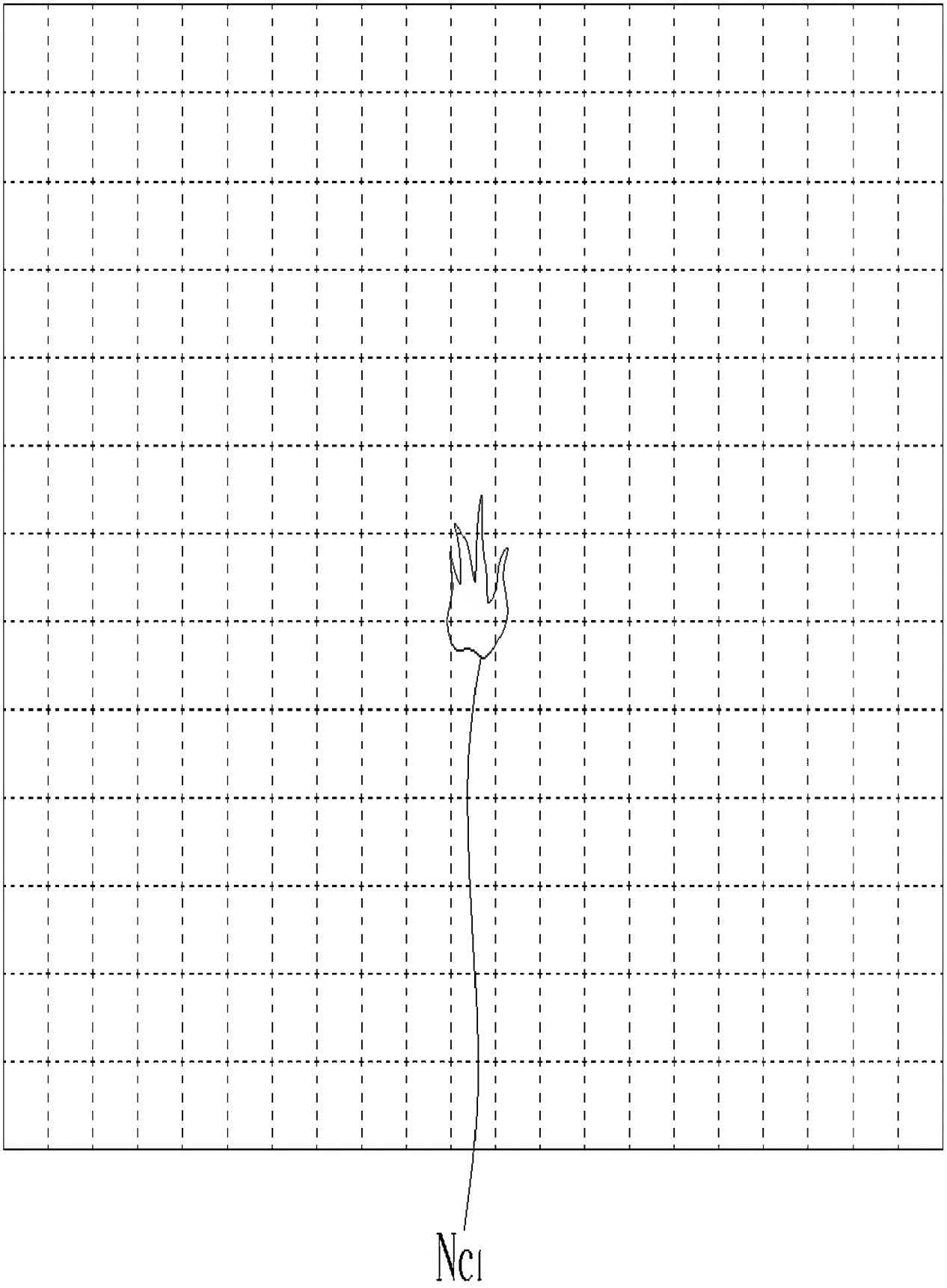

Fig. 13 Prior Art

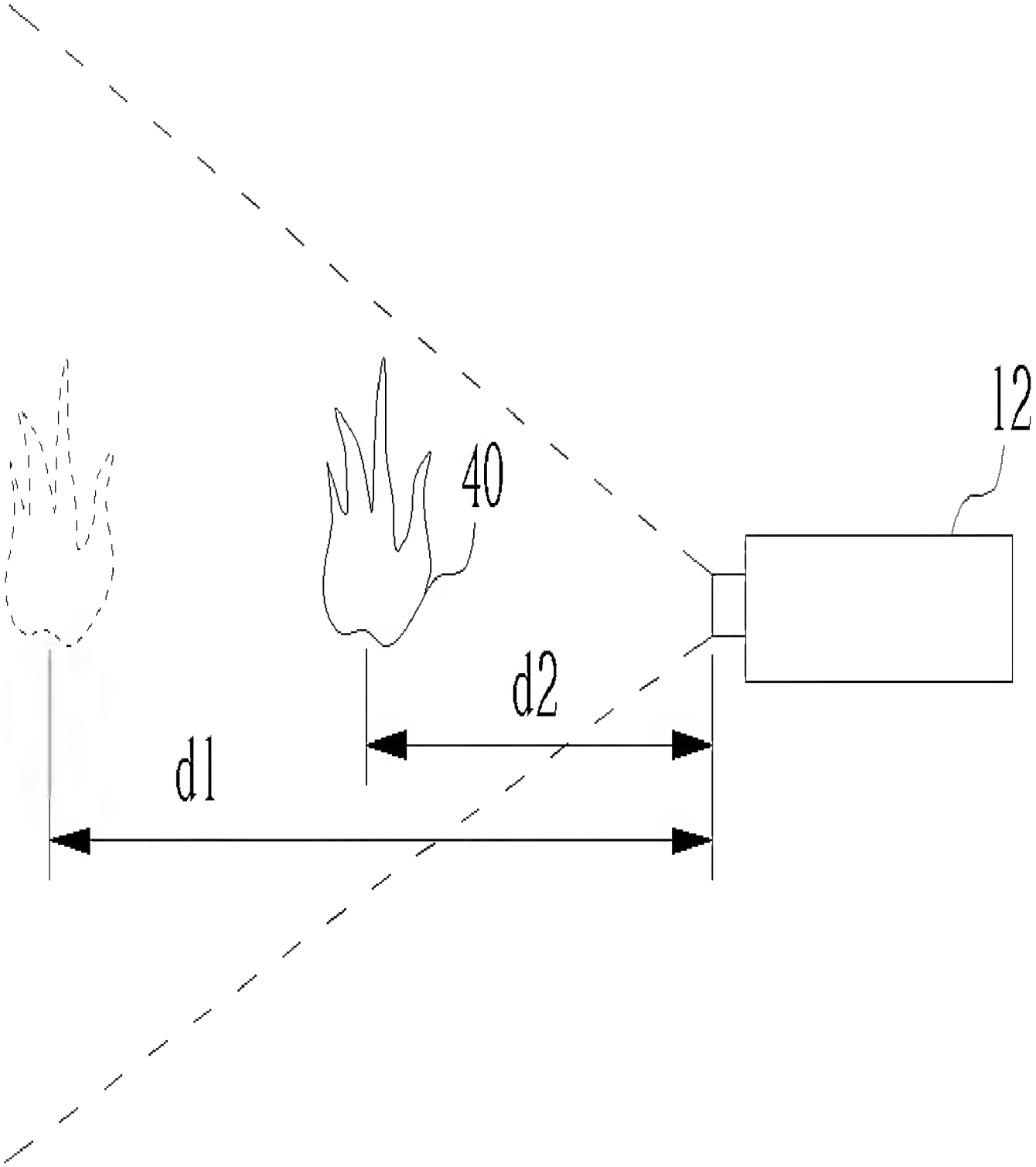

Fig. 14 Prior Art

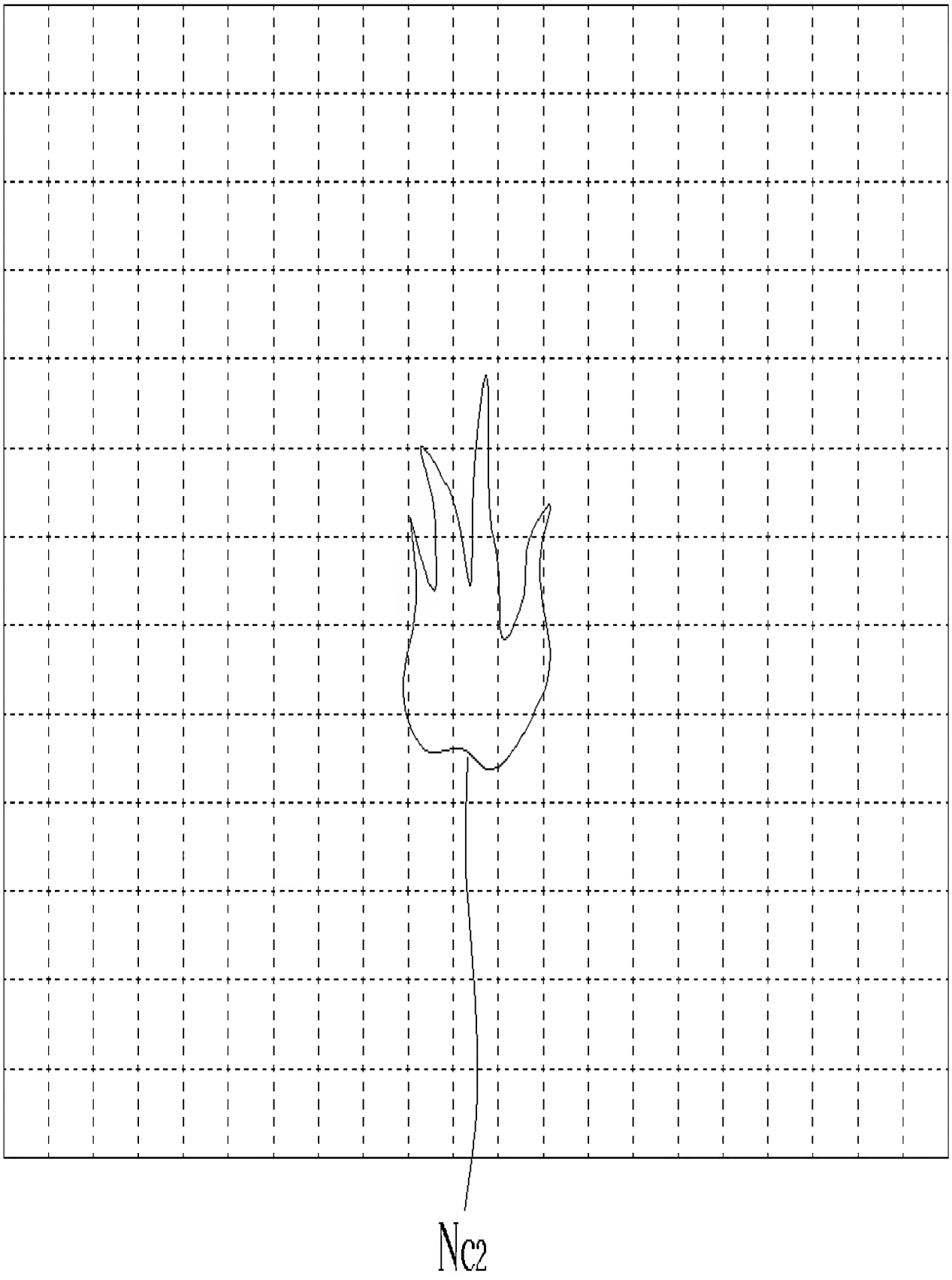

Fig. 15 Prior Art

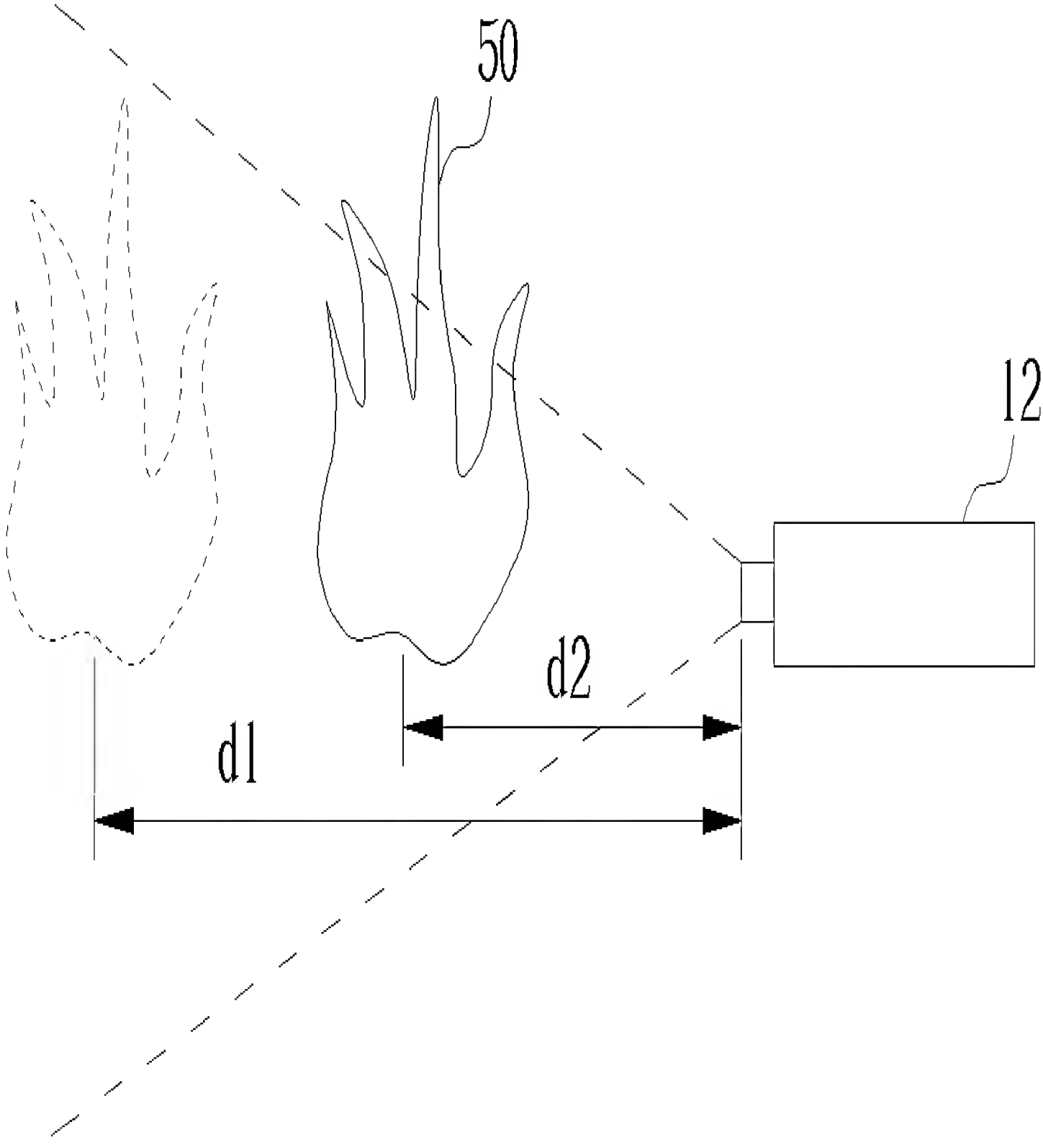

Fig. 16 Prior Art

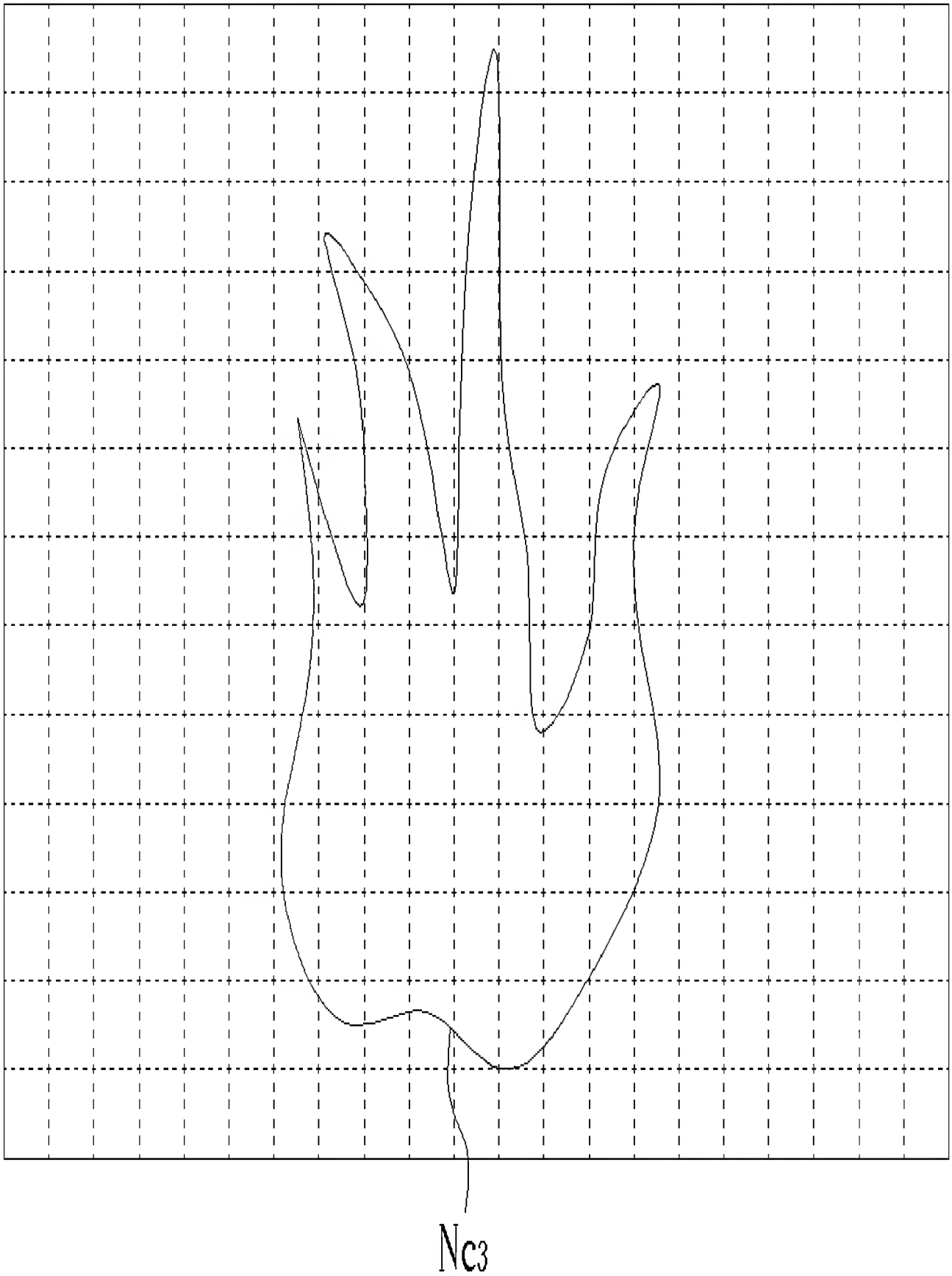

Fig. 17 Prior Art

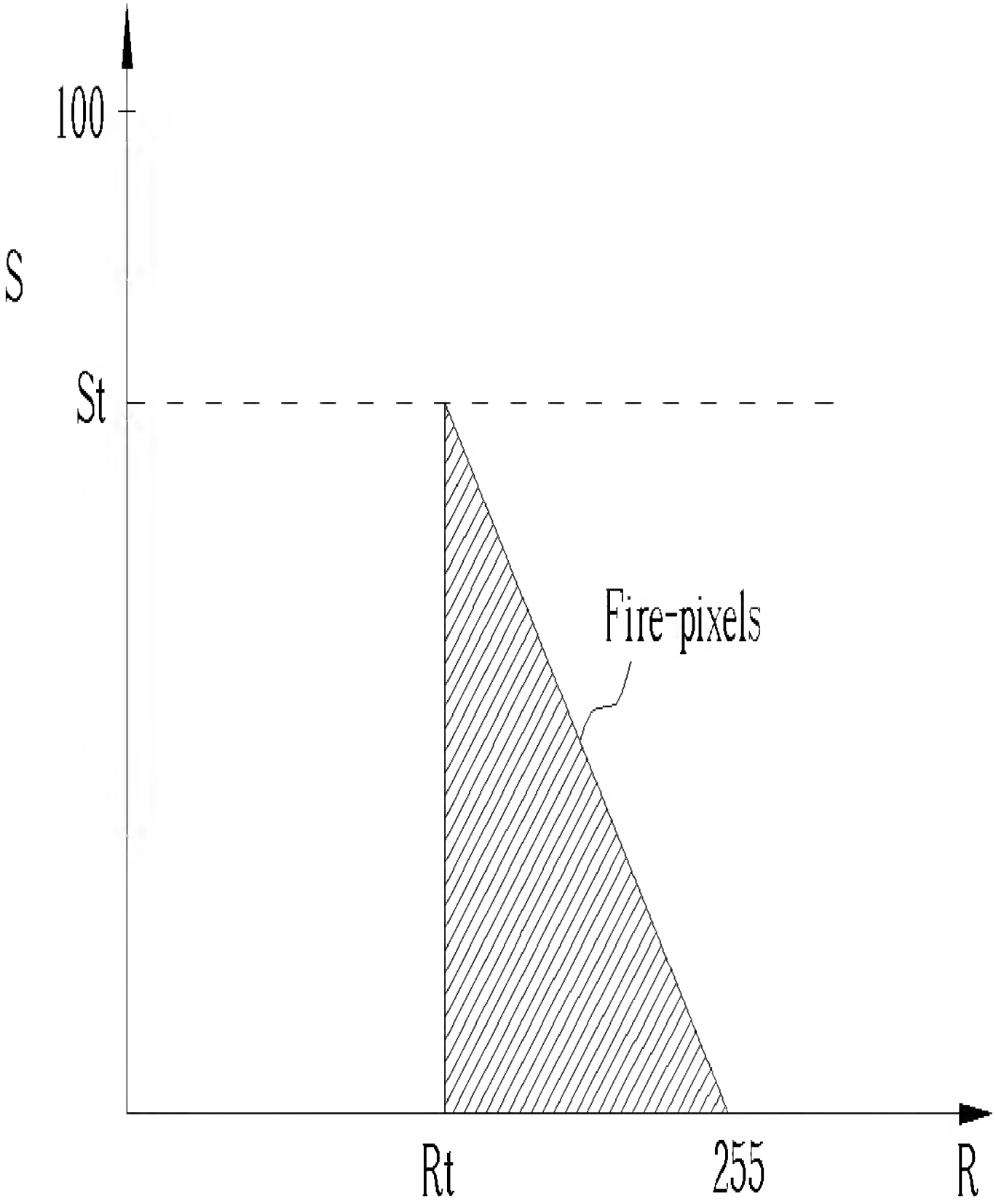

Fig. 18

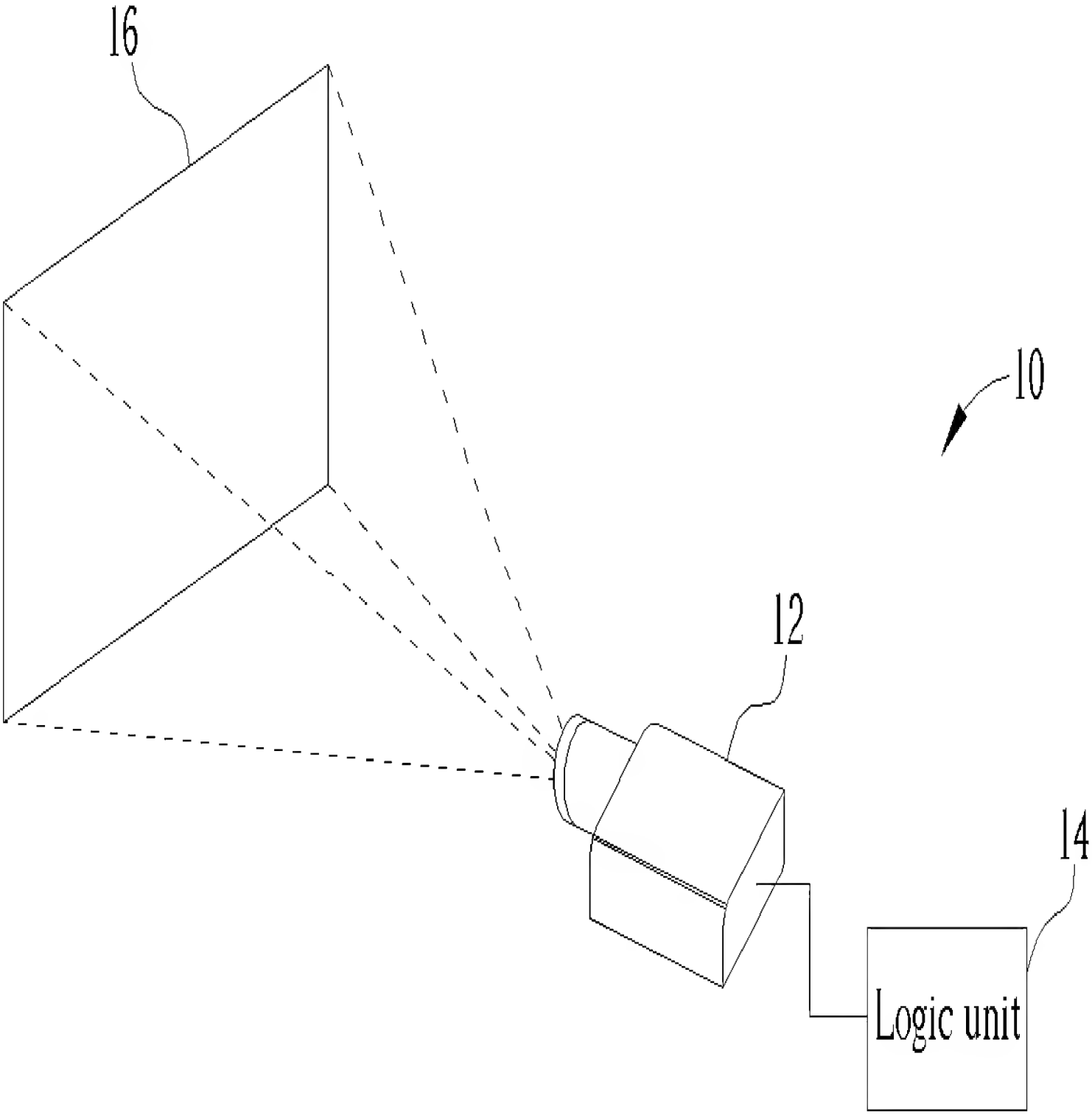

Fig. 19

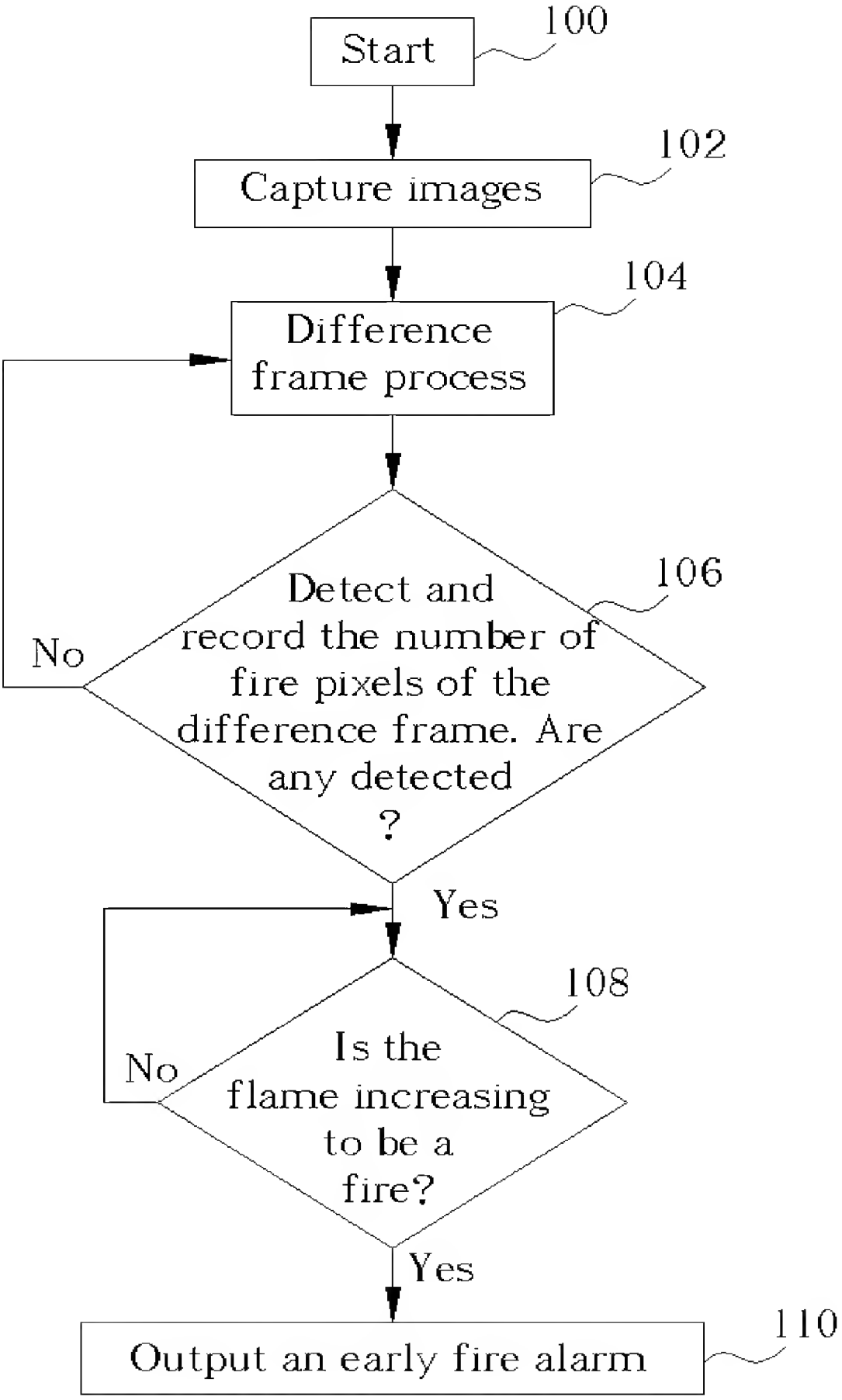
Start
100
Capture images
102
Difference frame process
104
Detect and record the number of fire pixels of the difference frame. Are any detected ?
106
No
Yes
Is the flame increasing to be a fire?
108
No
Yes
Output an early fire alarm
110

Fig. 20

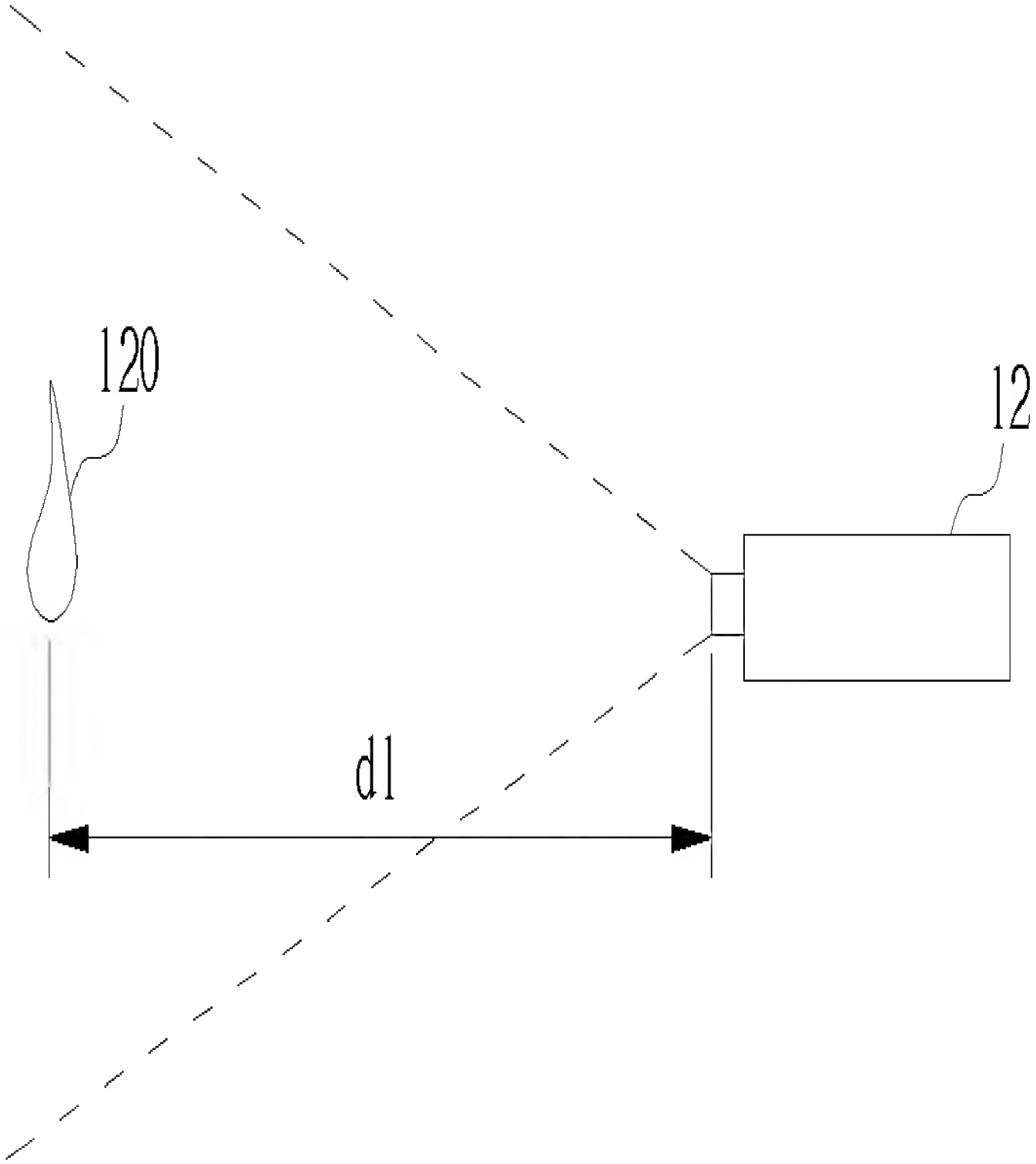

Fig. 21

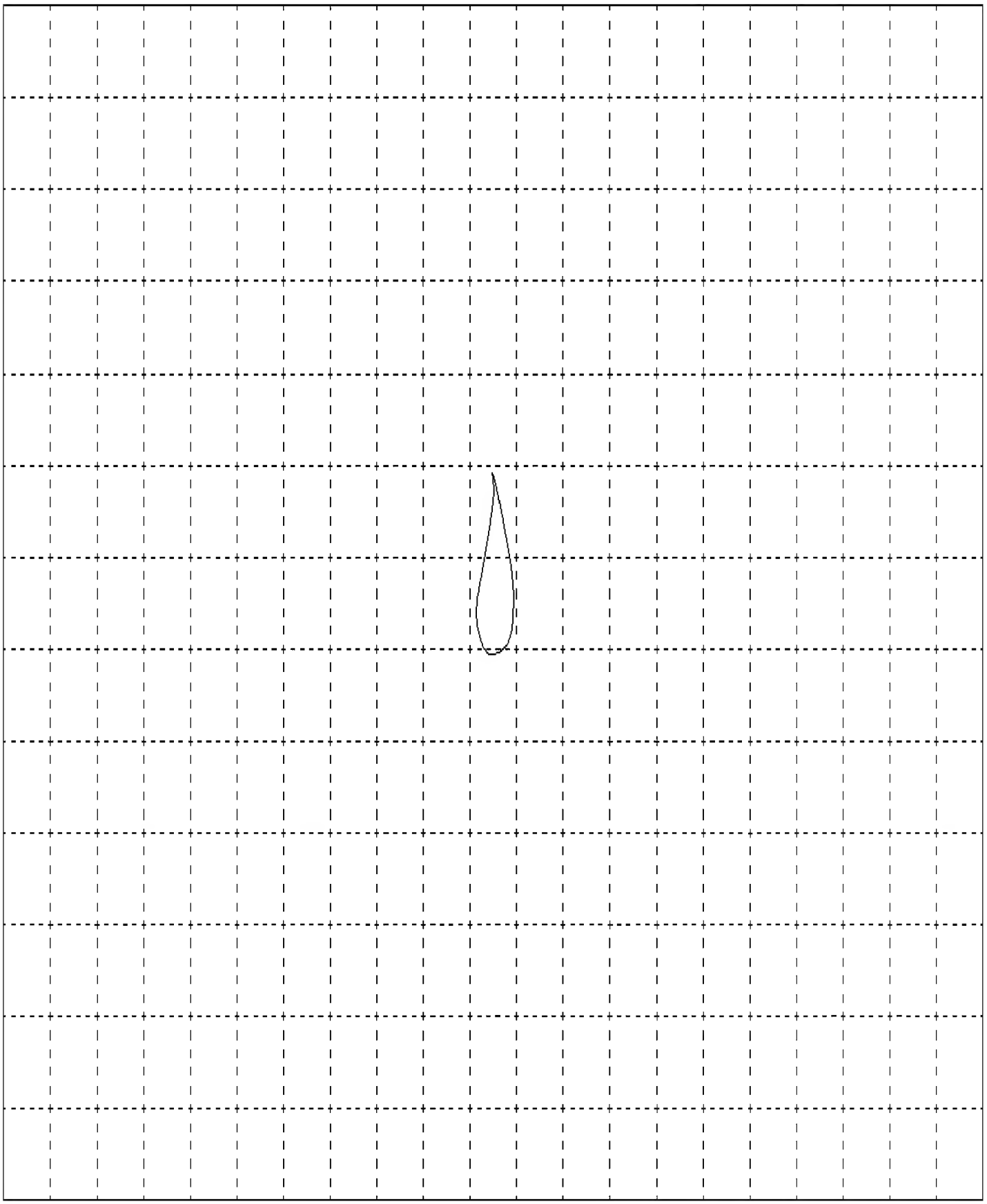

Fig. 22

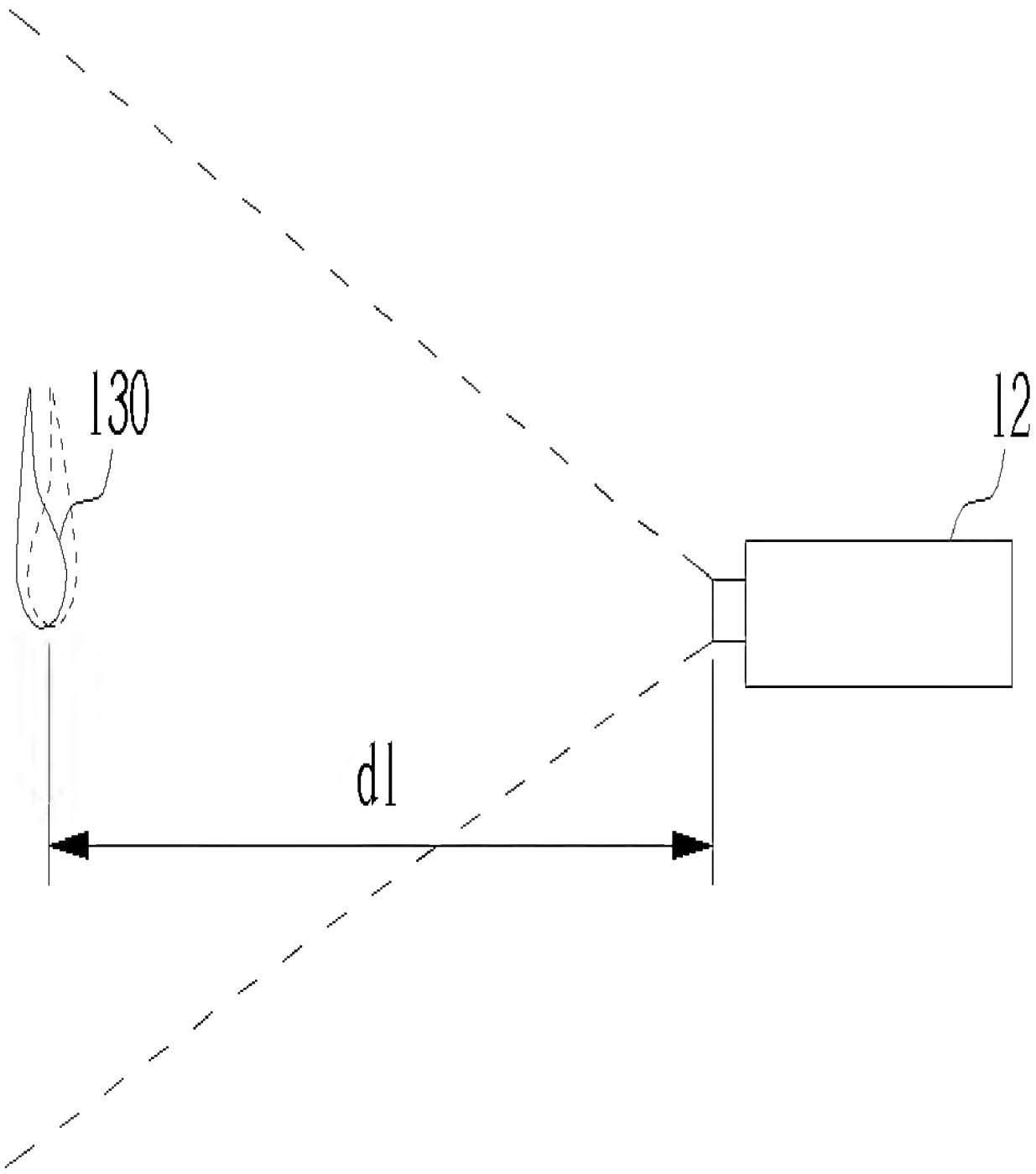

Fig. 23

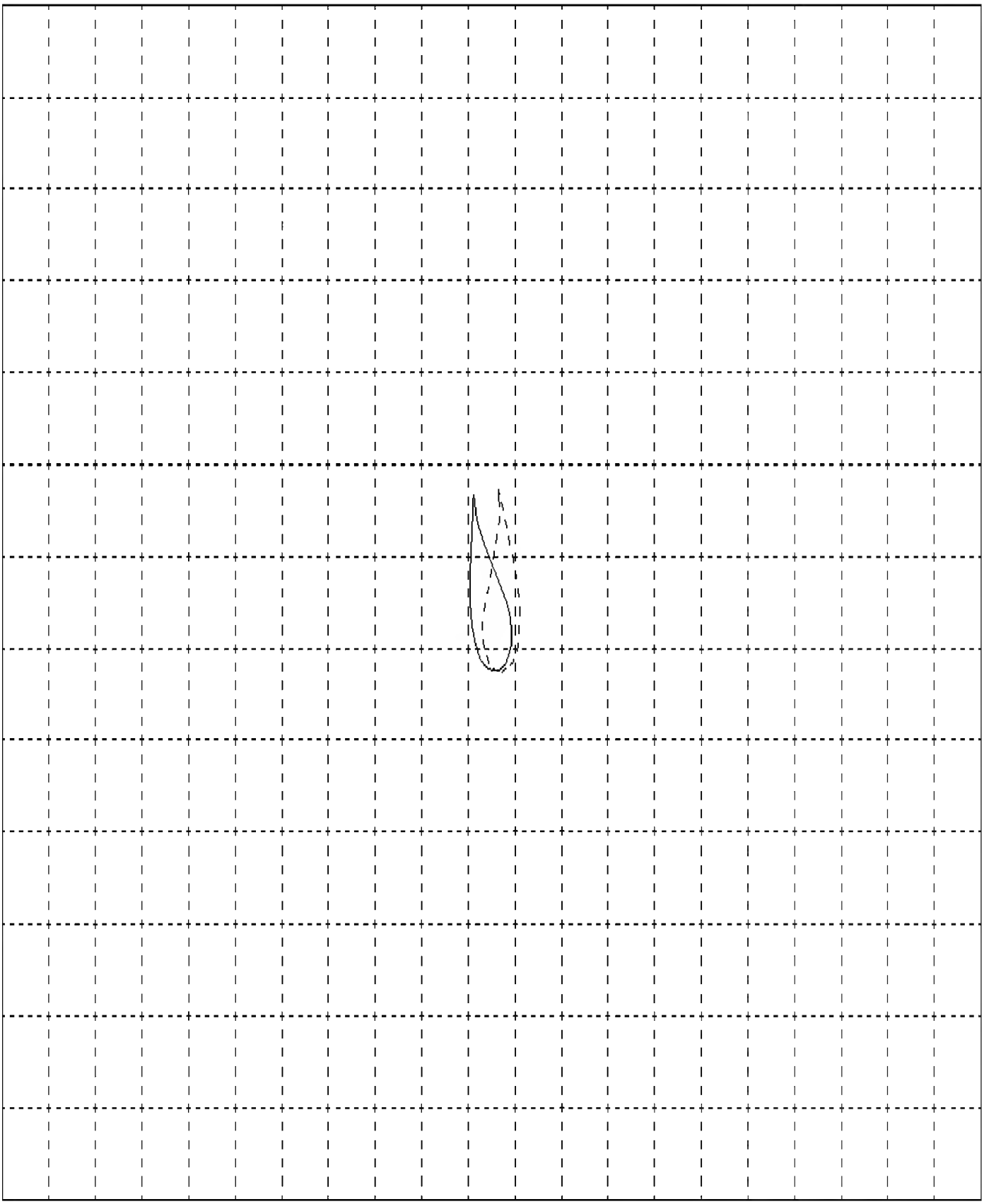

Fig. 24

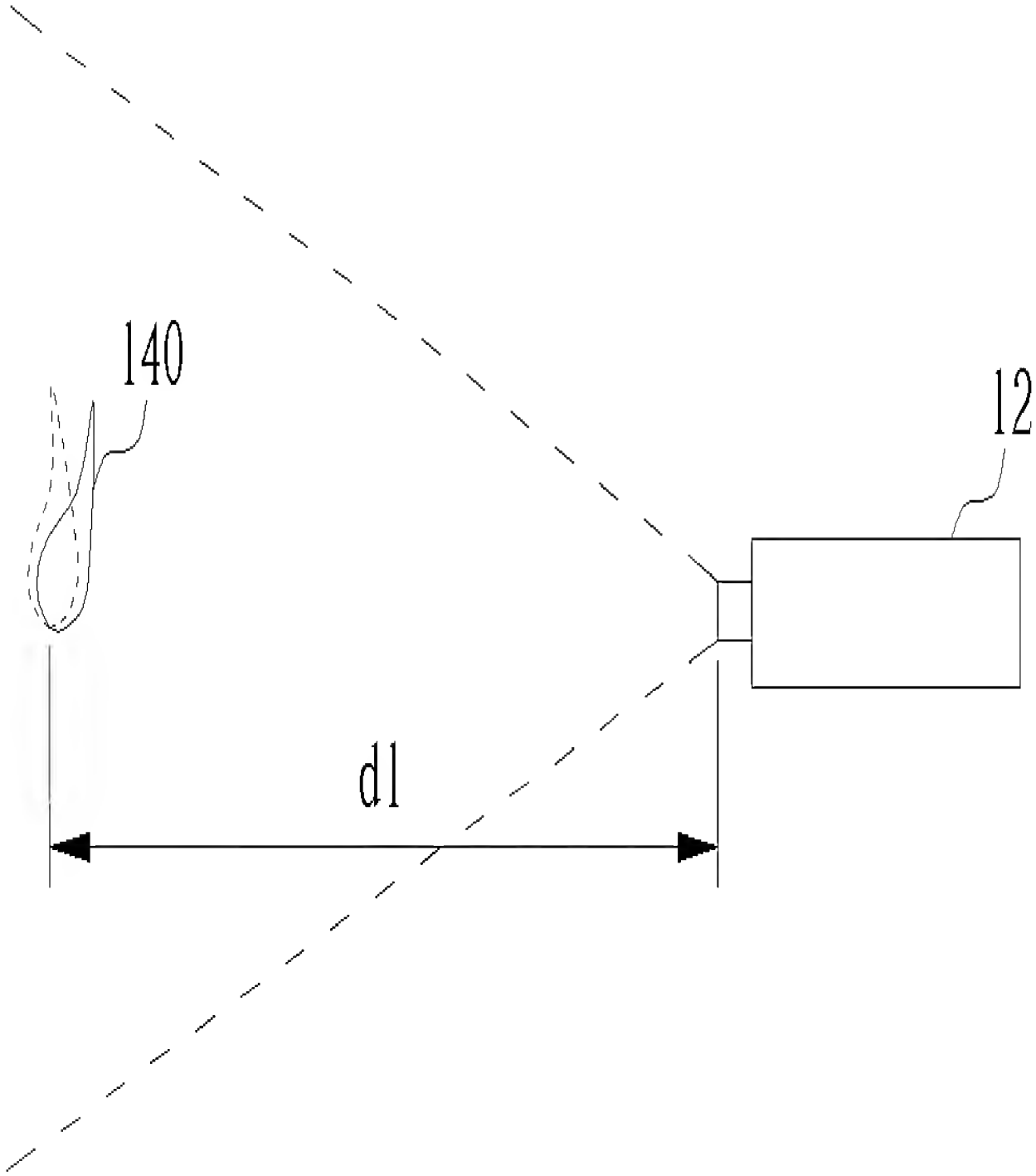

Fig. 25

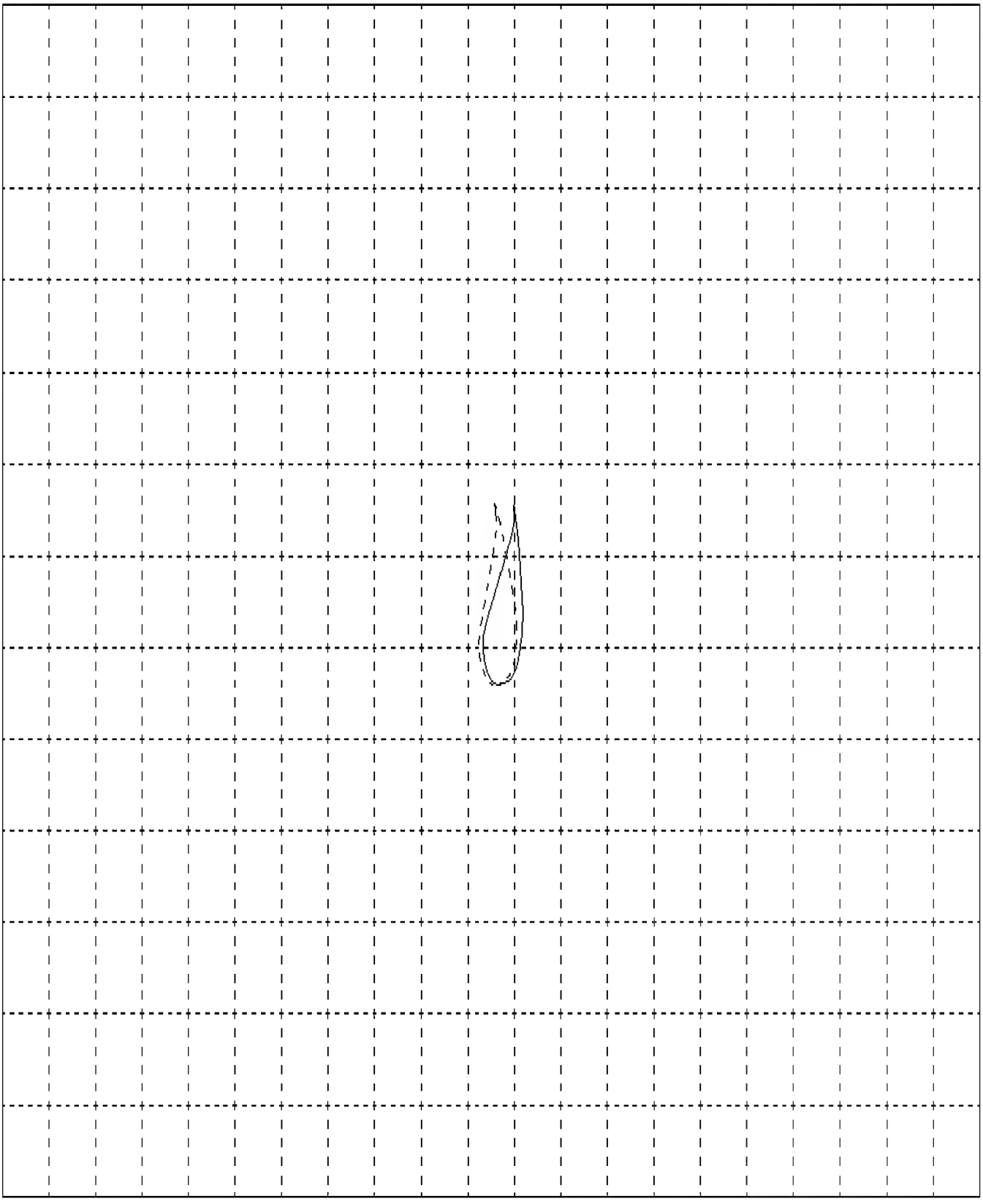

Fig. 26

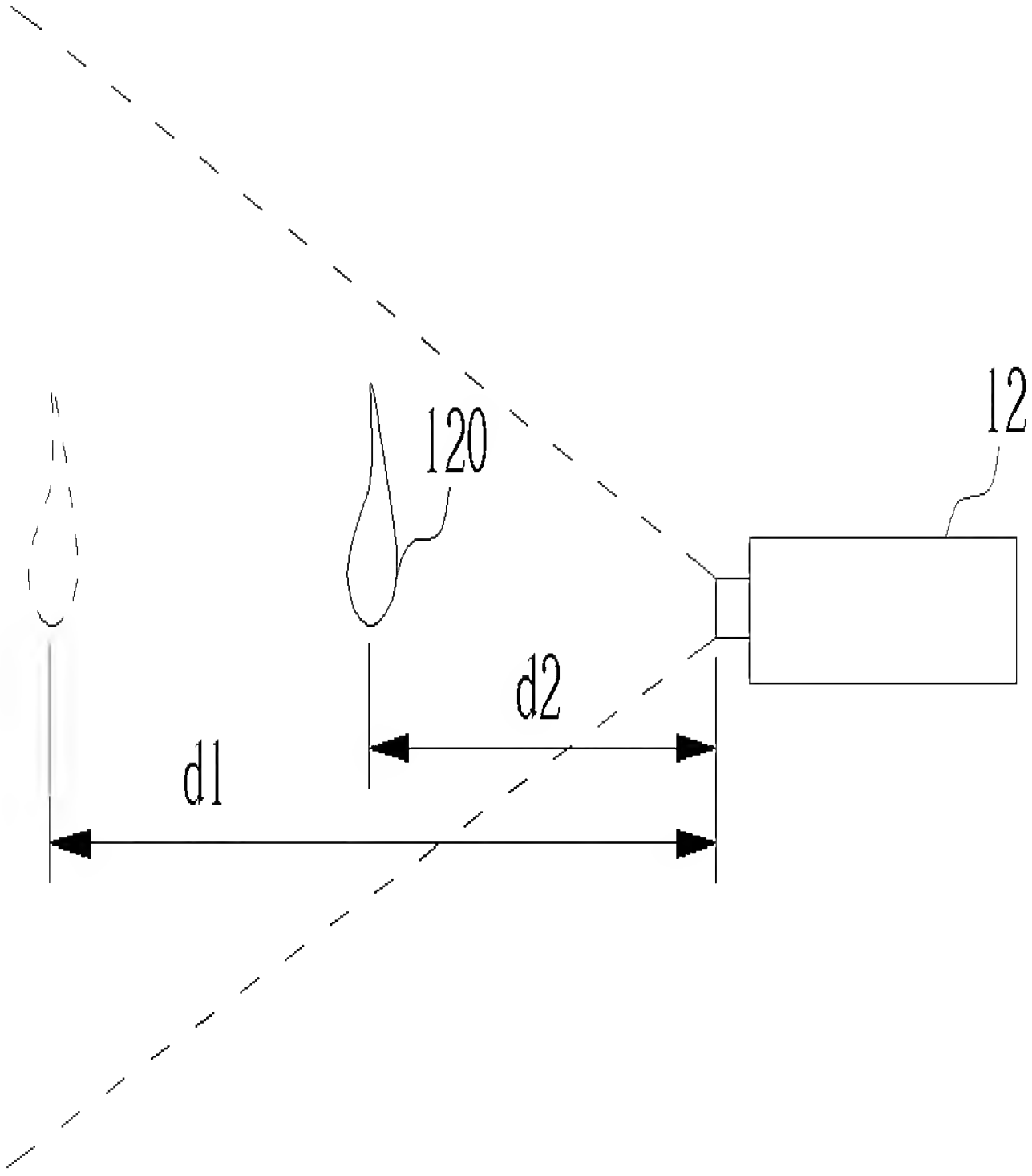

Fig. 27

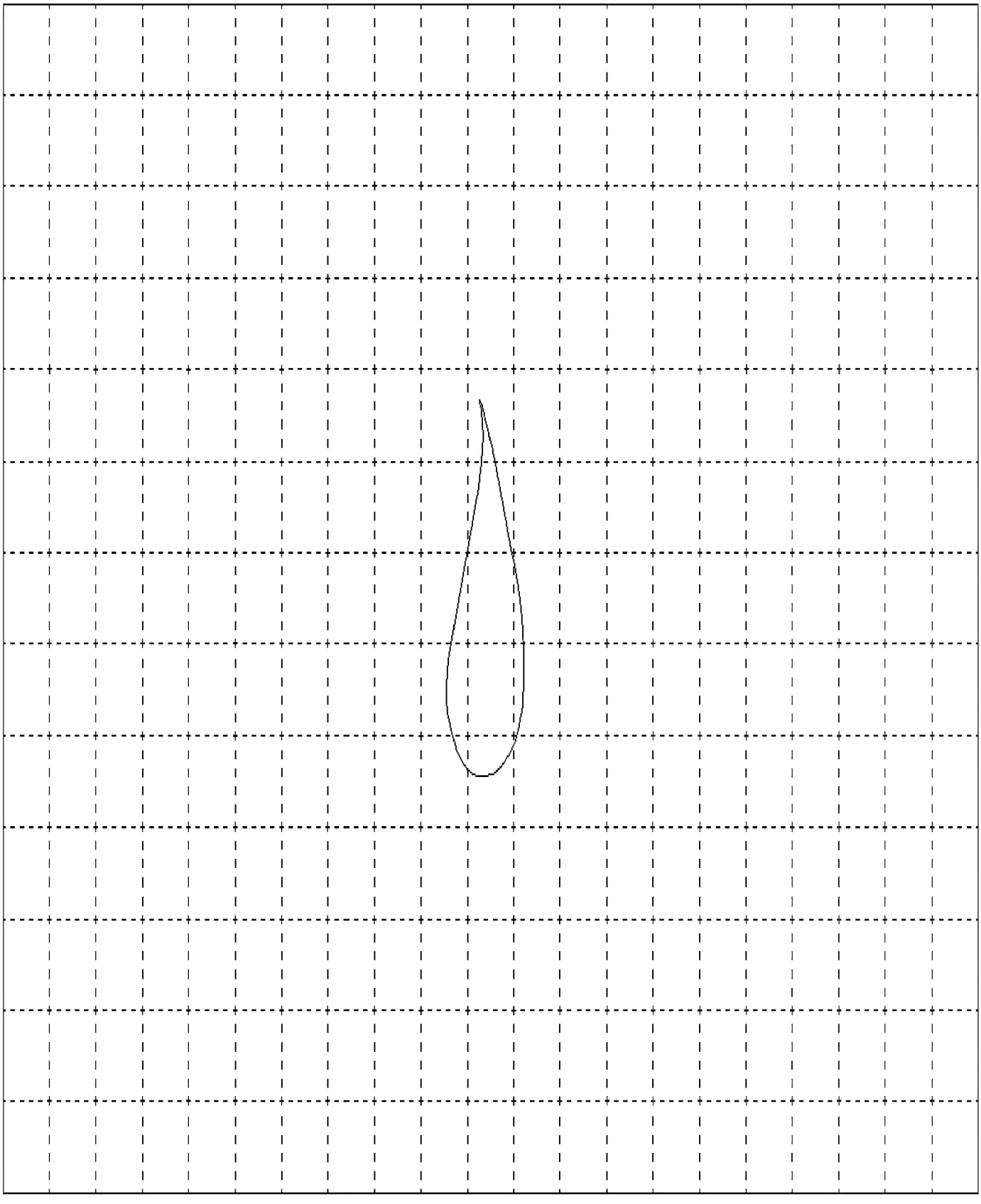

Fig. 28

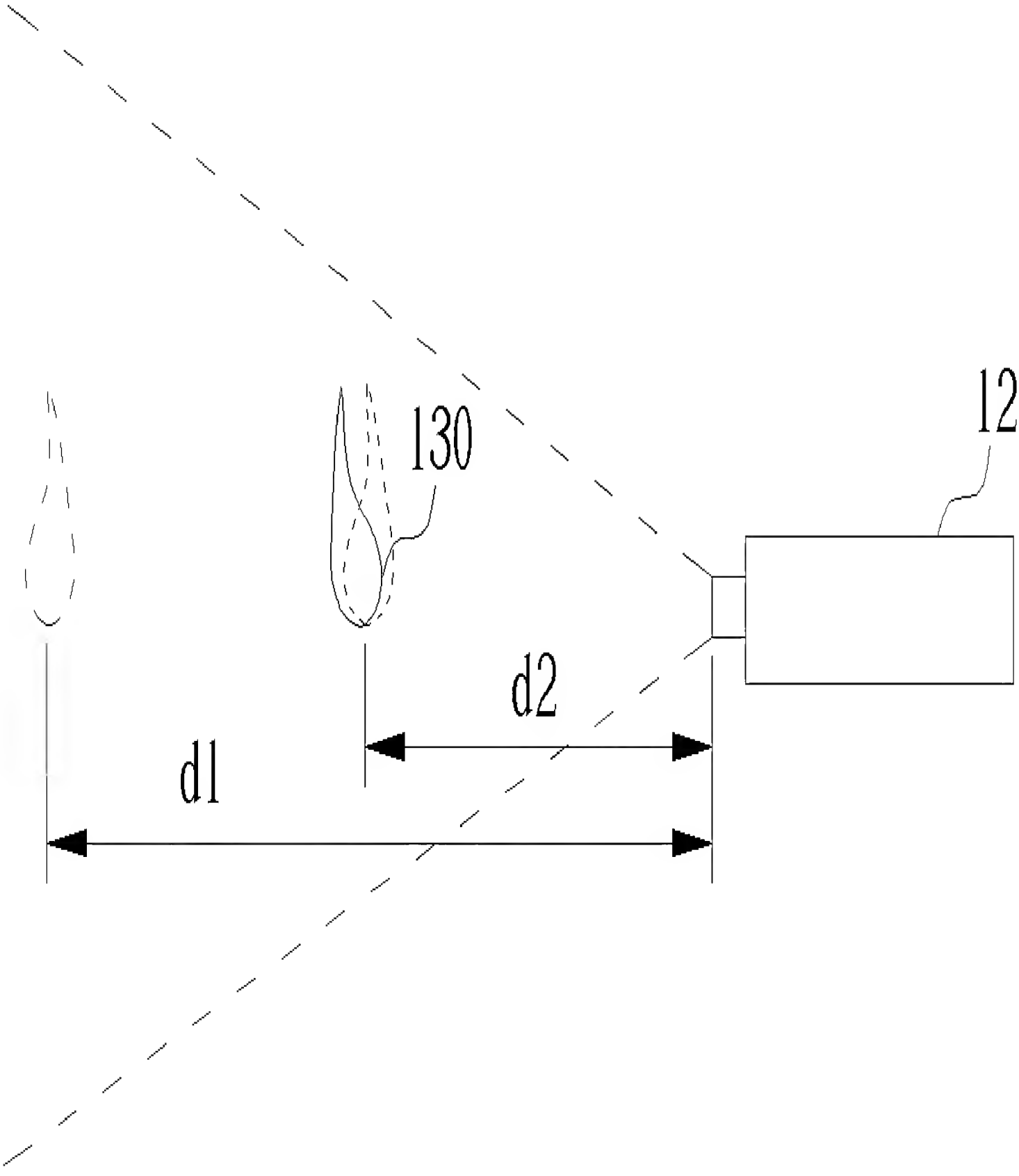

Fig. 29

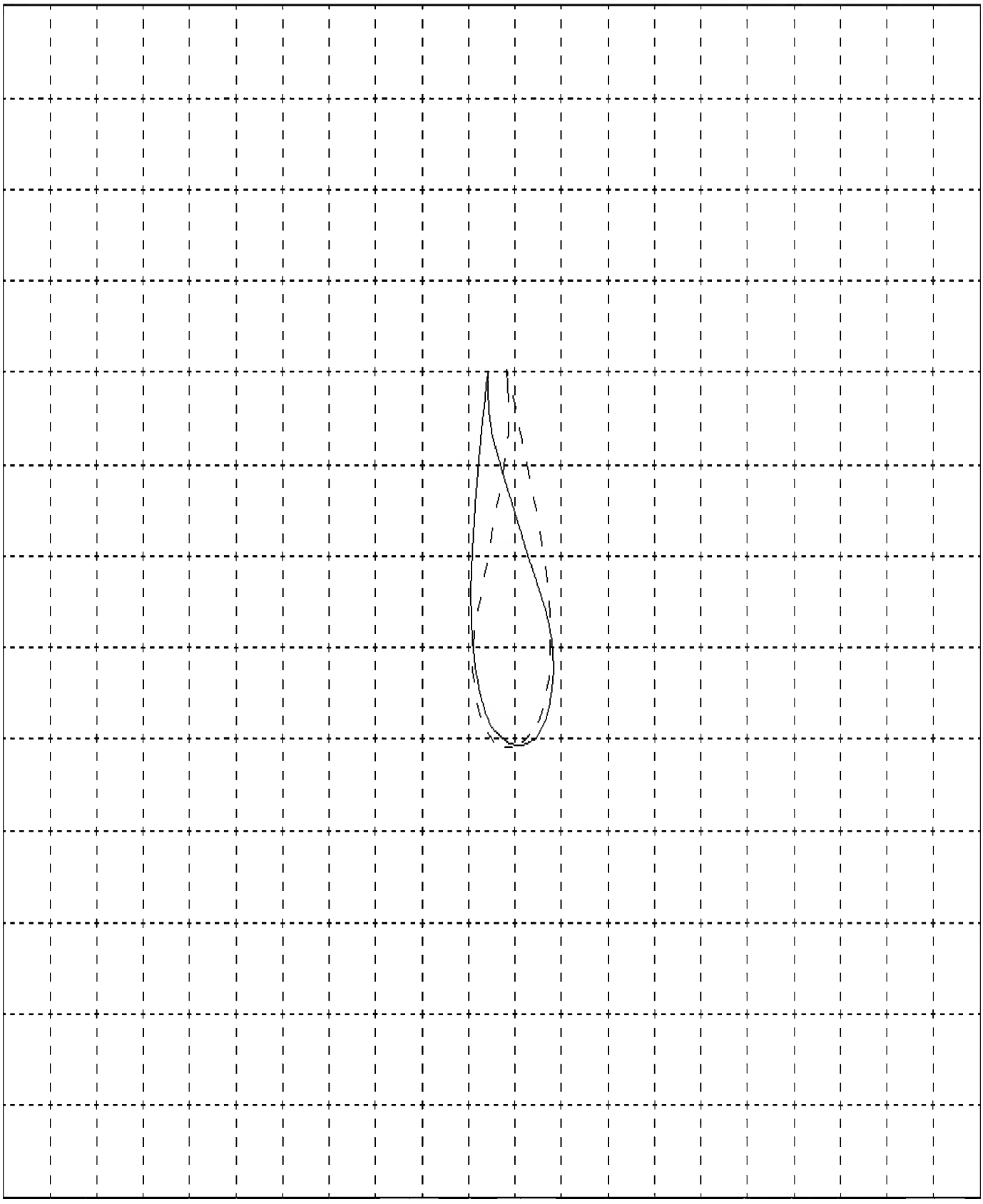

Fig. 30

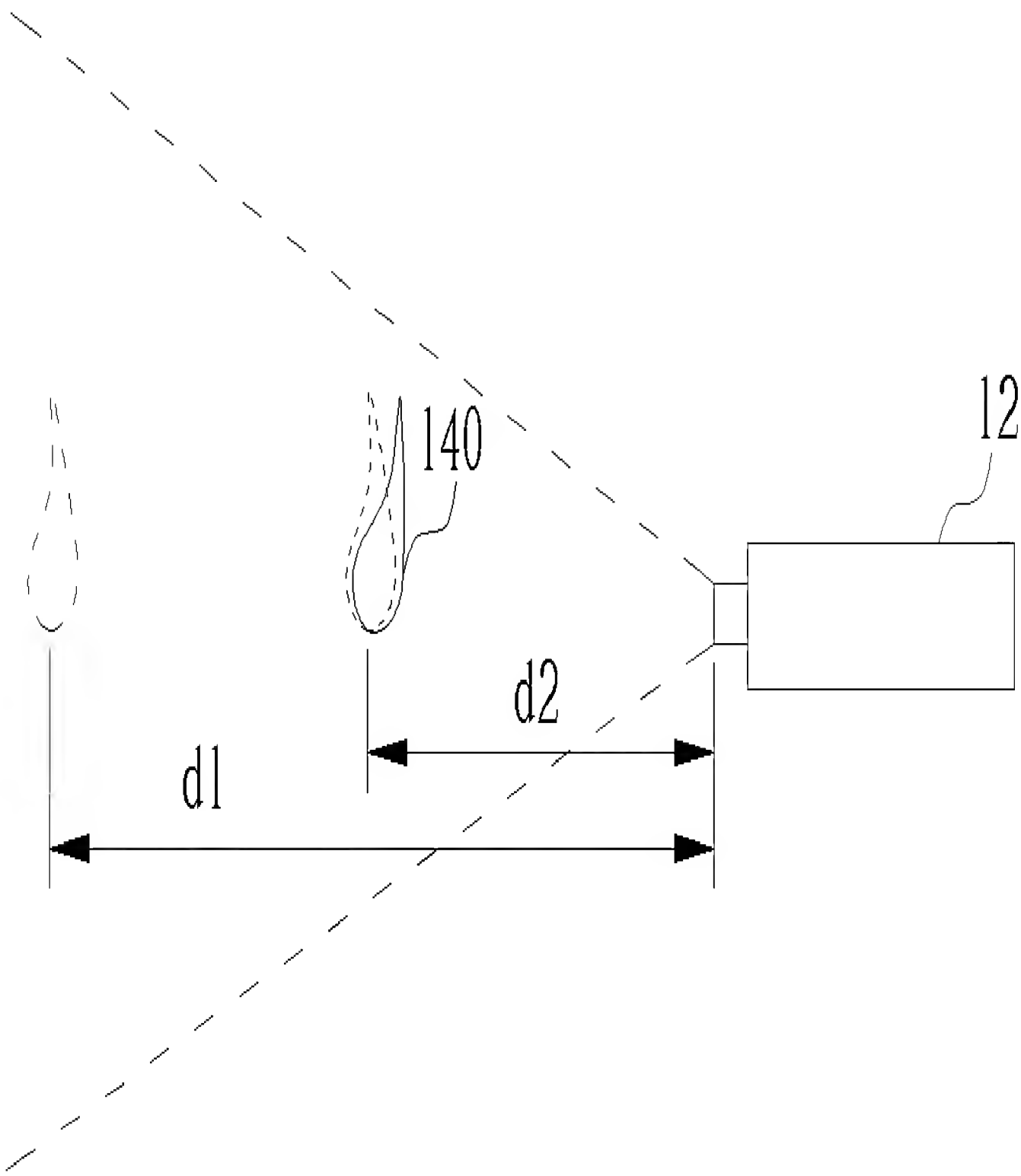

Fig. 31

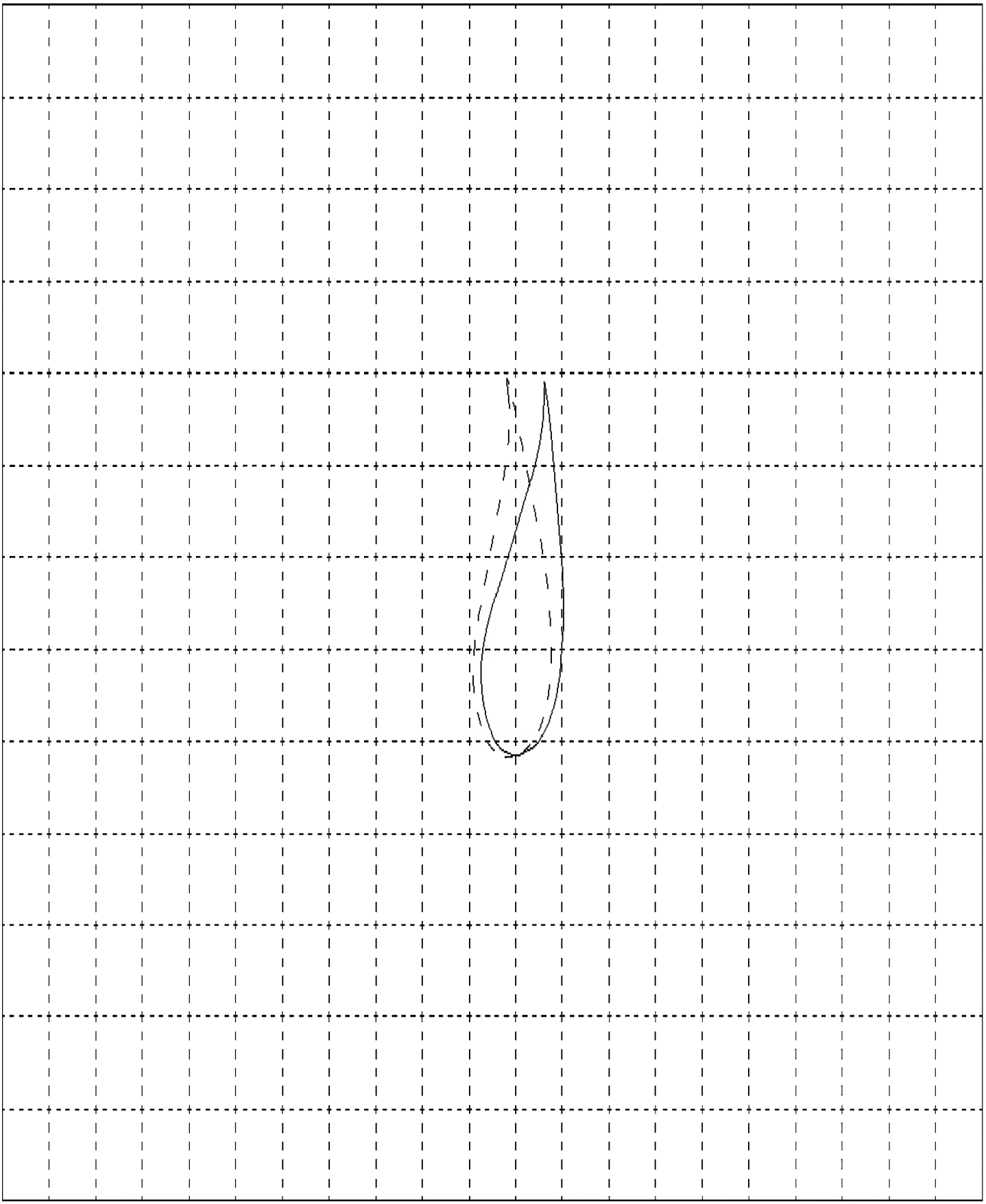

Fig. 32

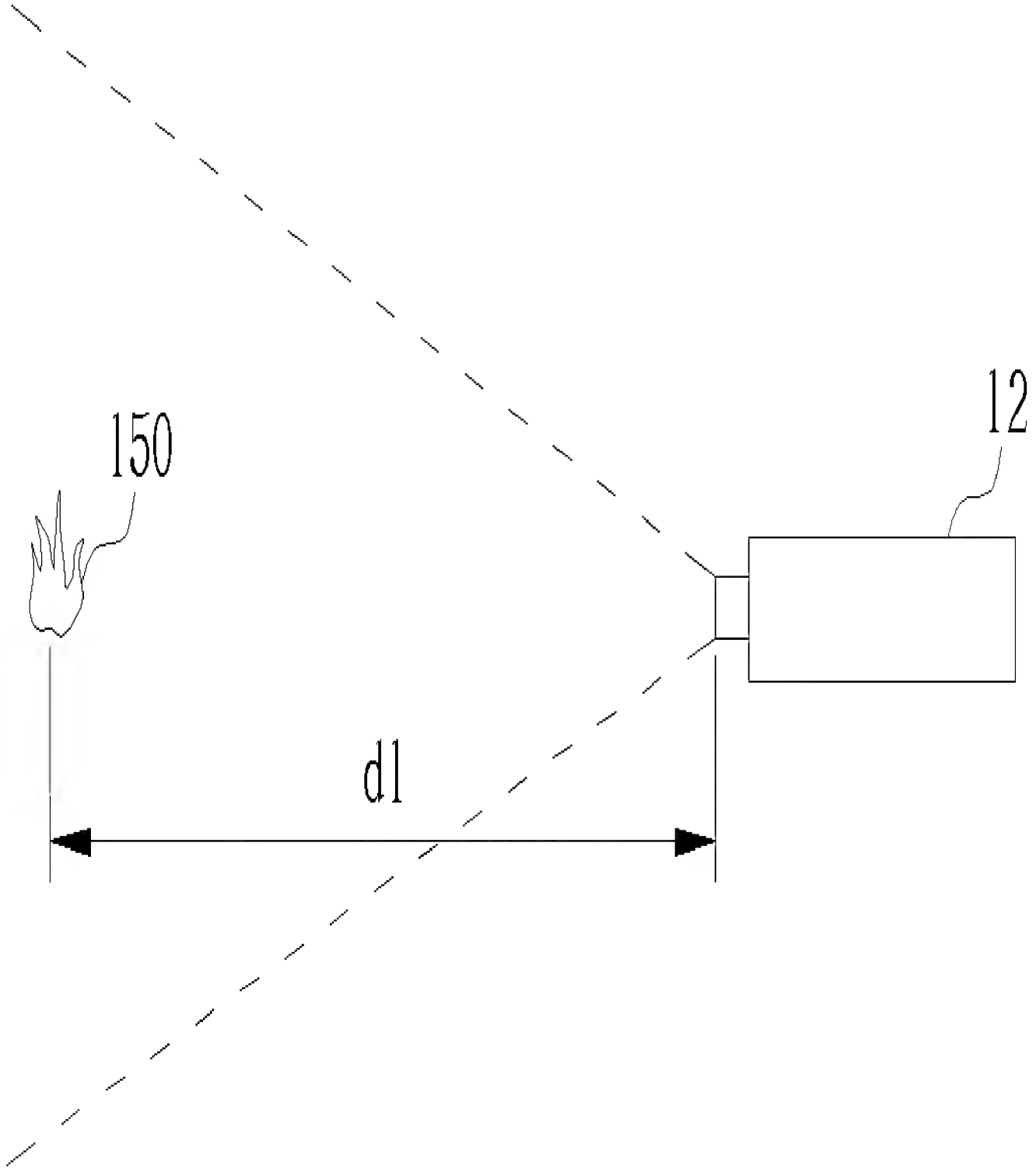

Fig. 33

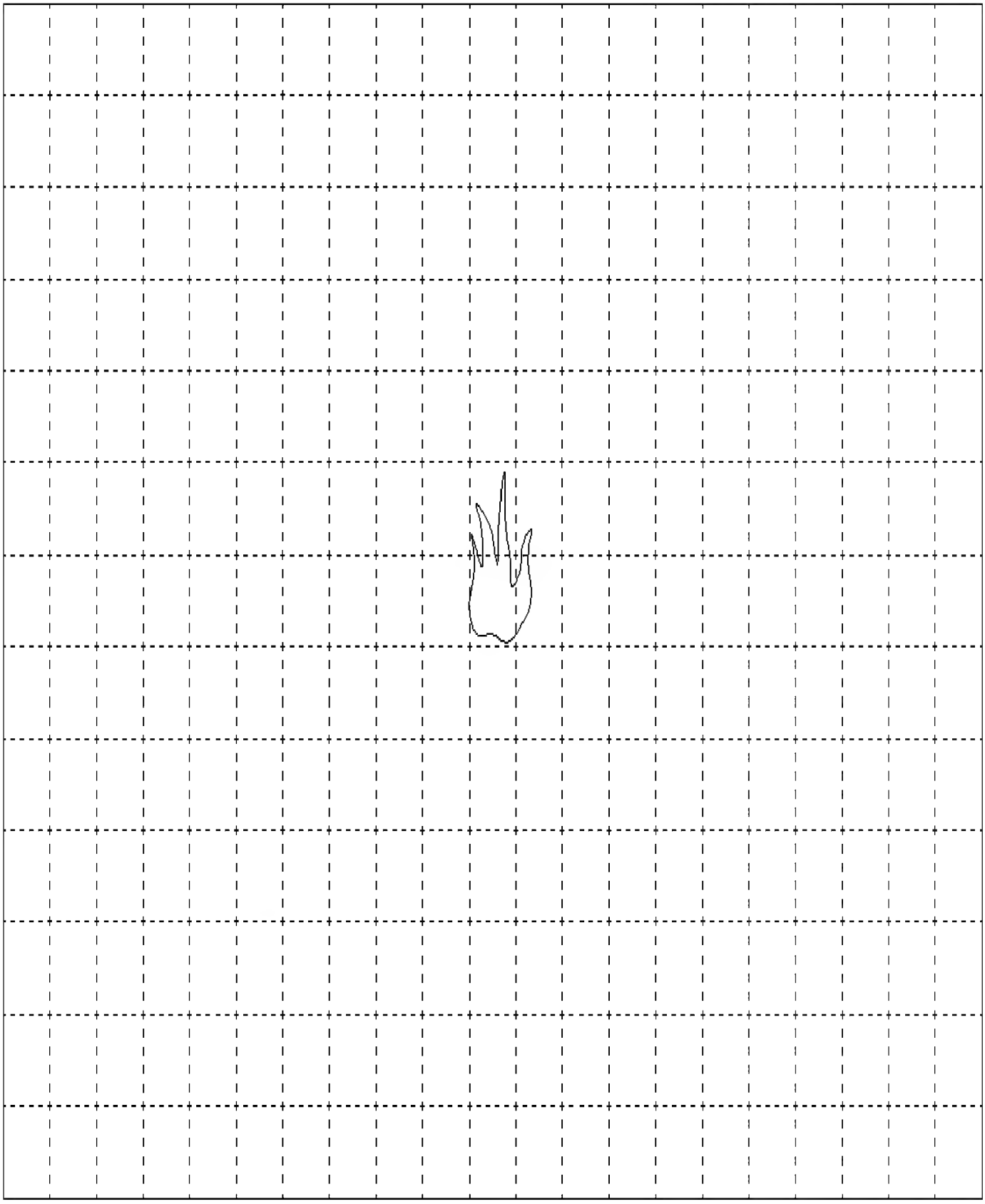

Fig. 34

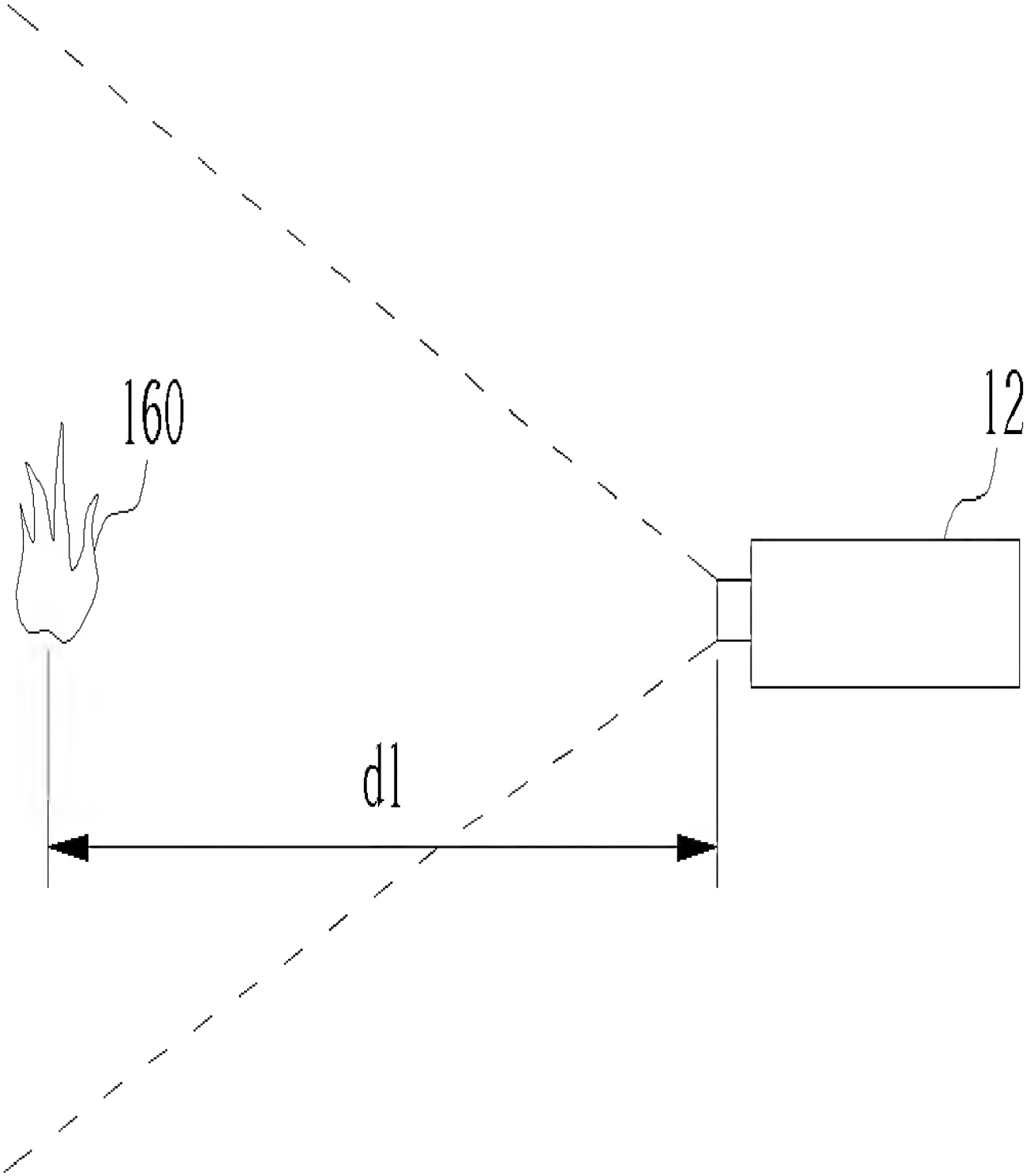

Fig. 35

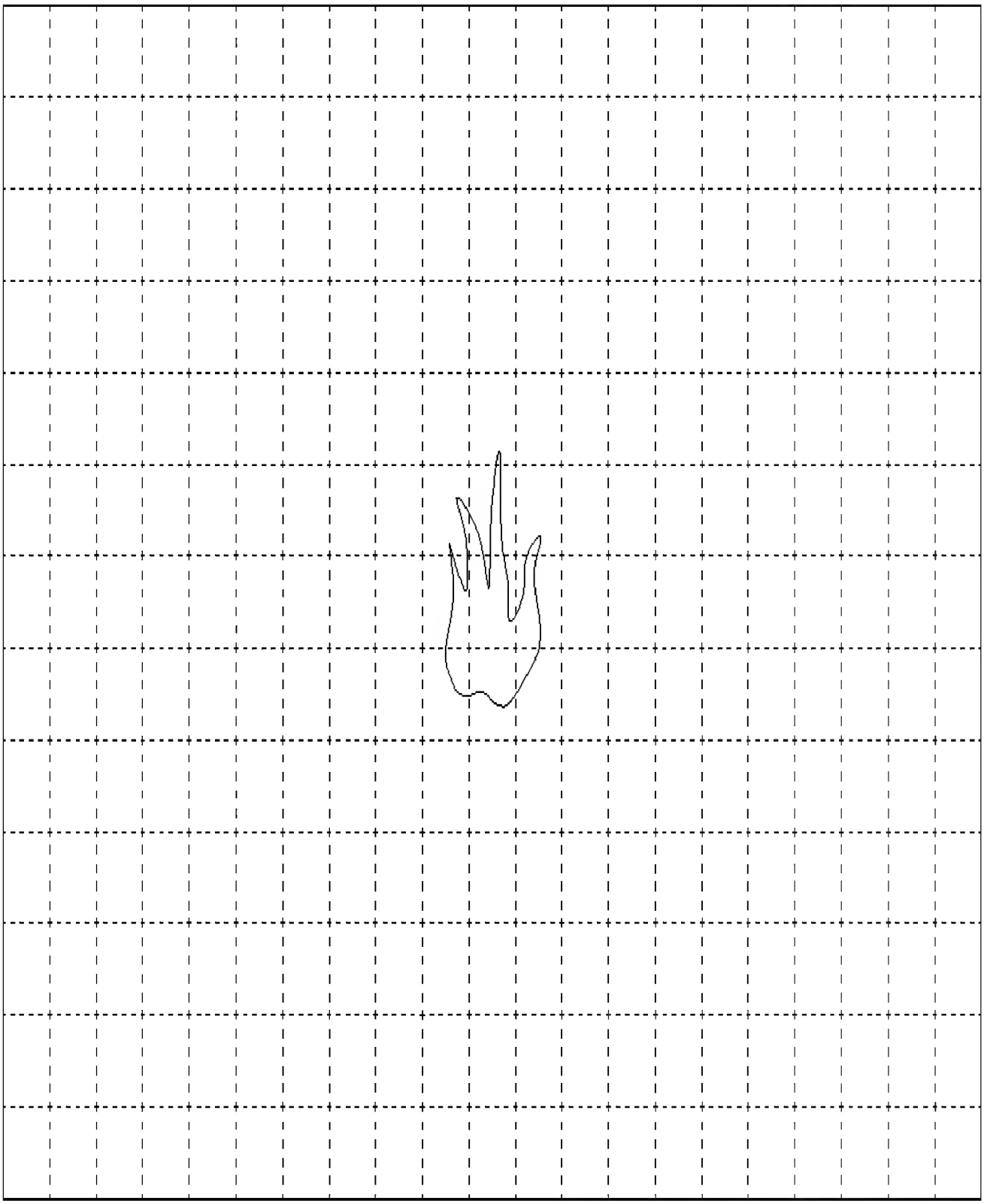

Fig. 36

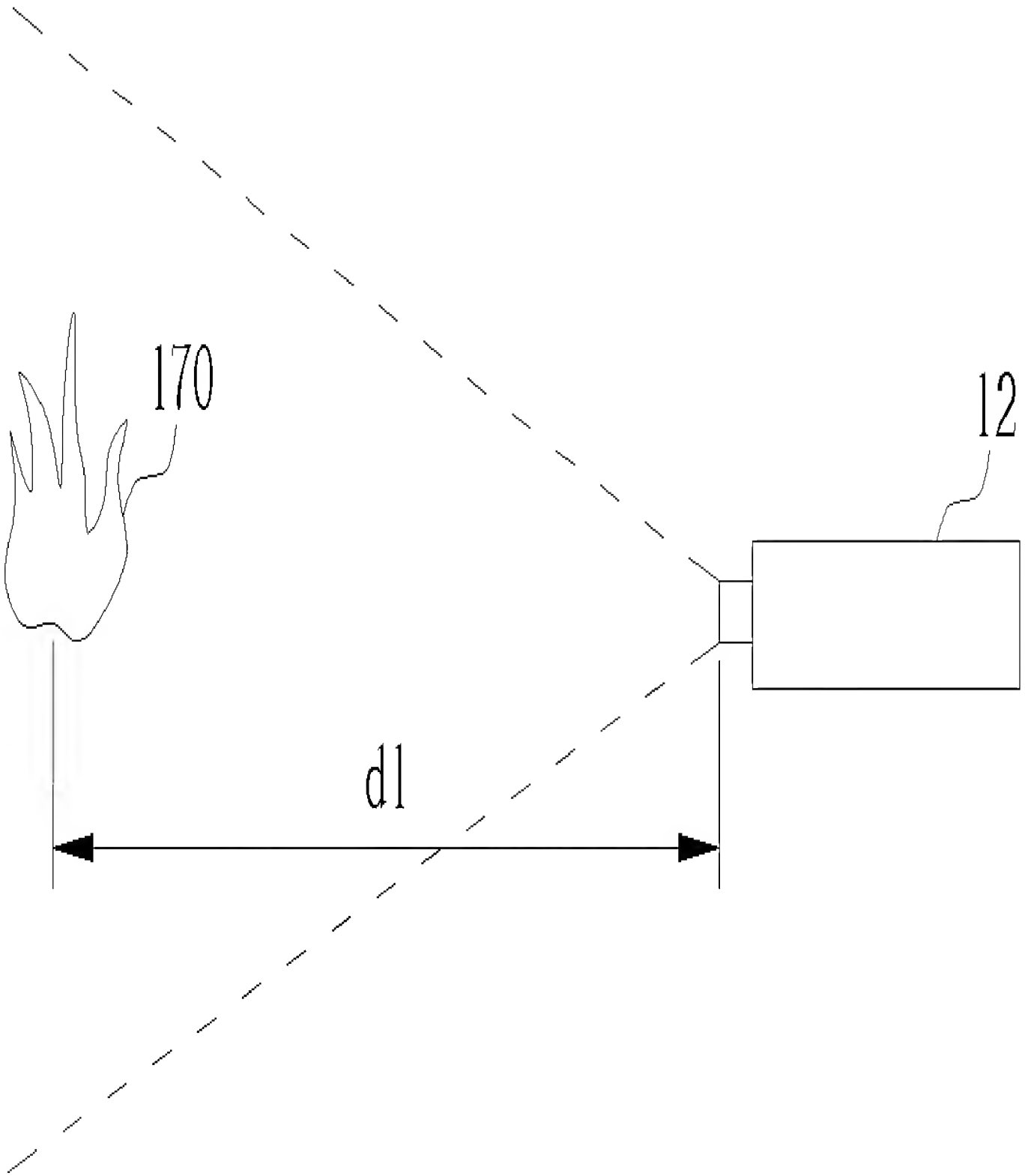

Fig. 37

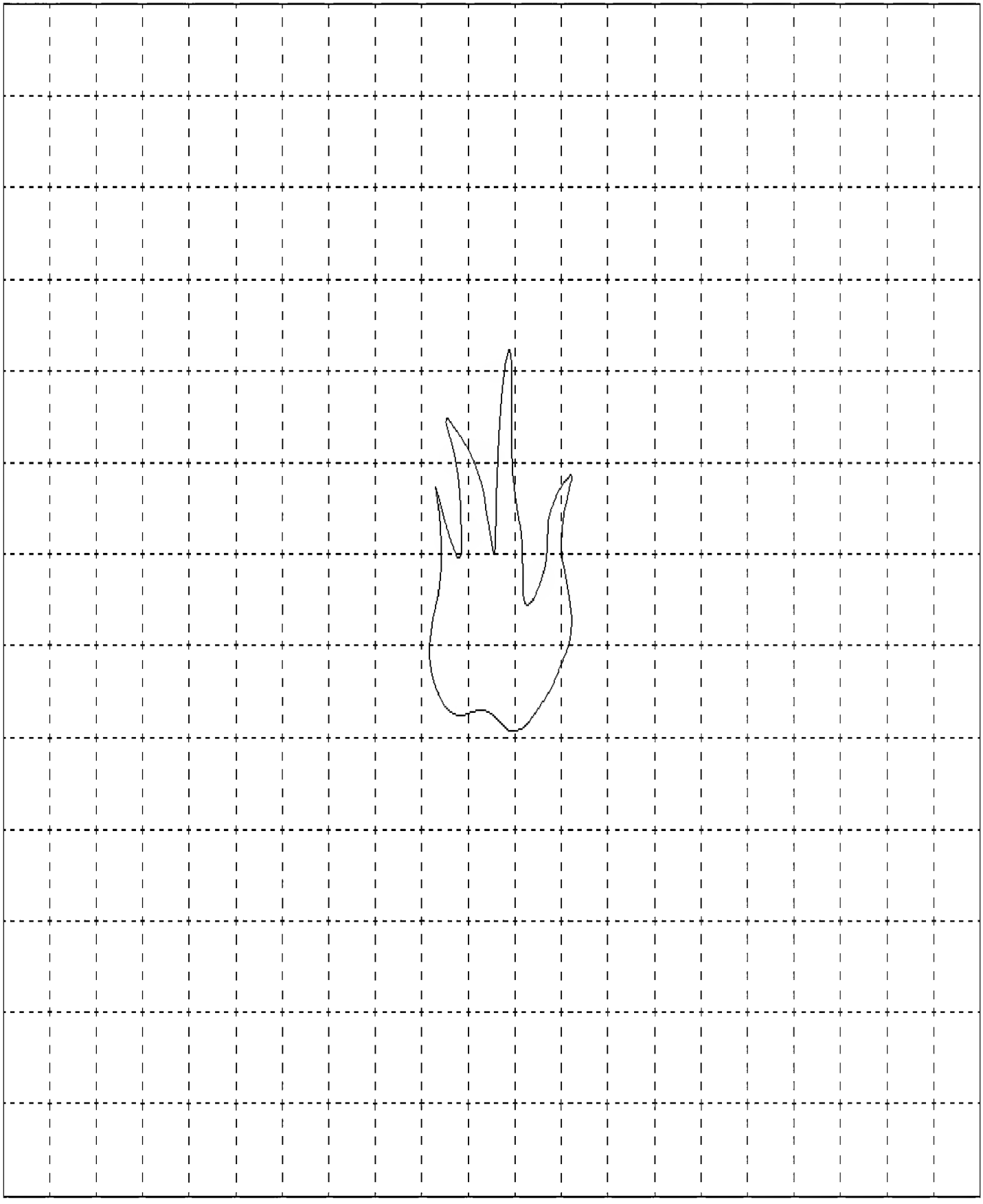

Fig. 38

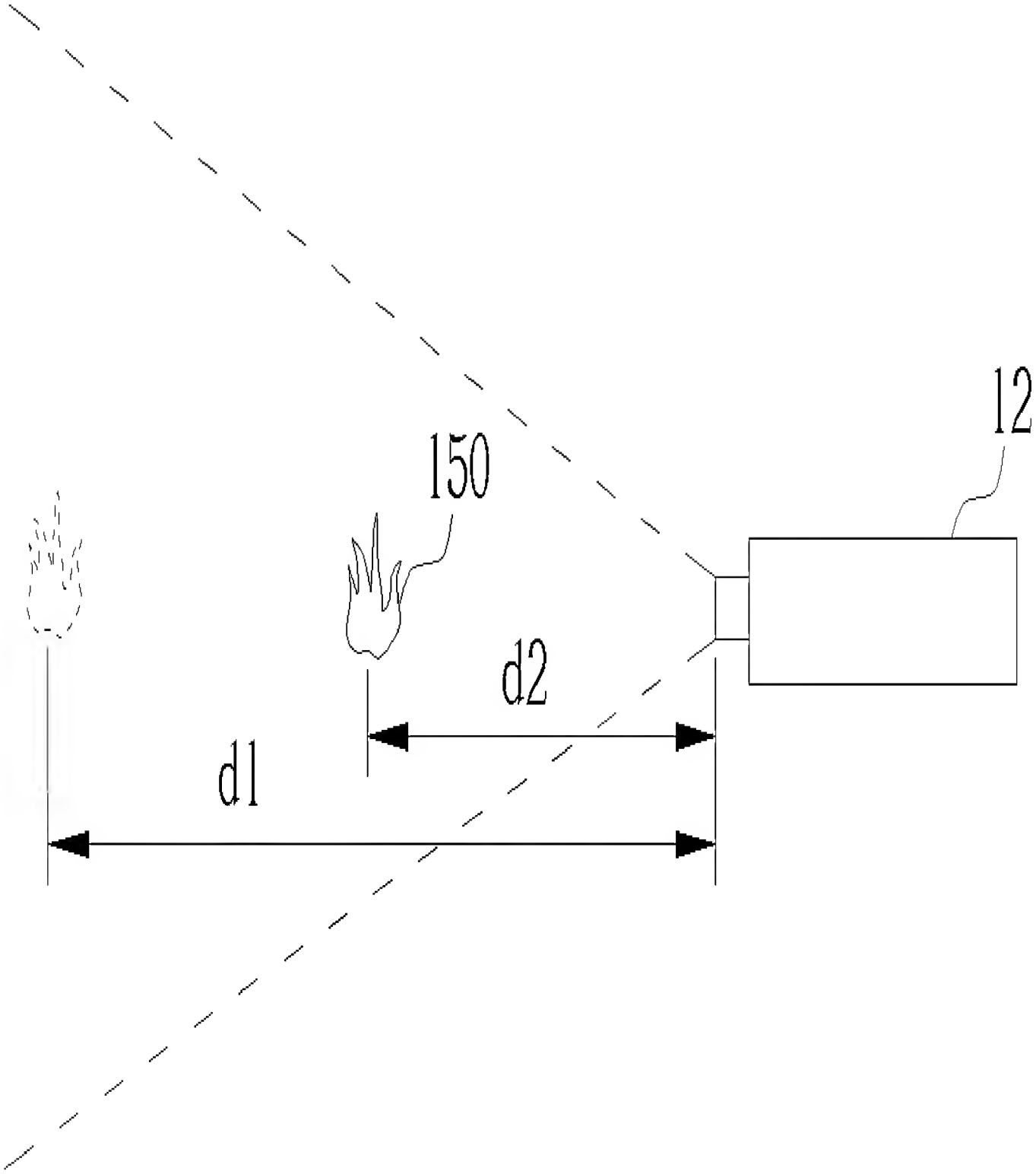

Fig. 39

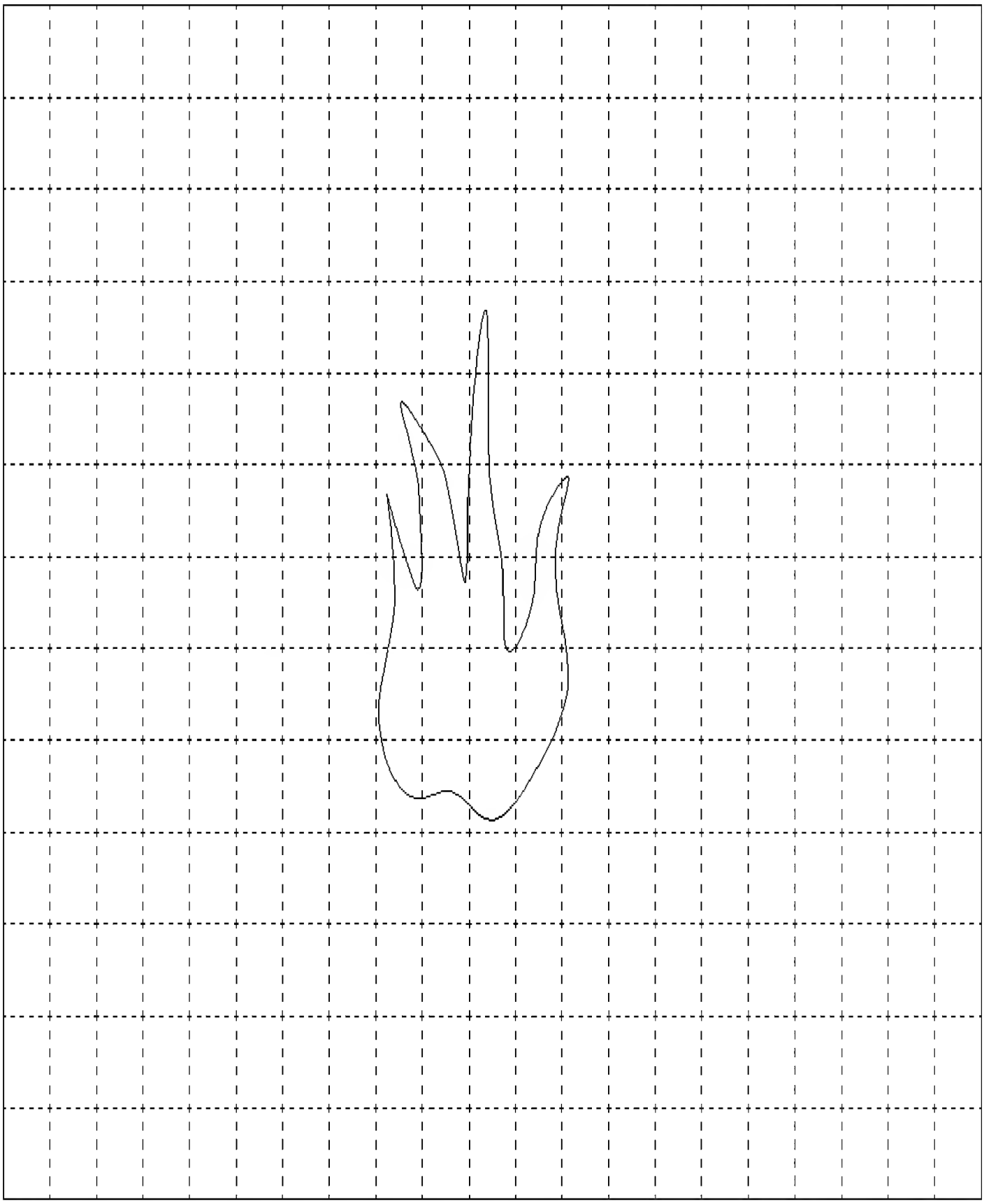

Fig. 40

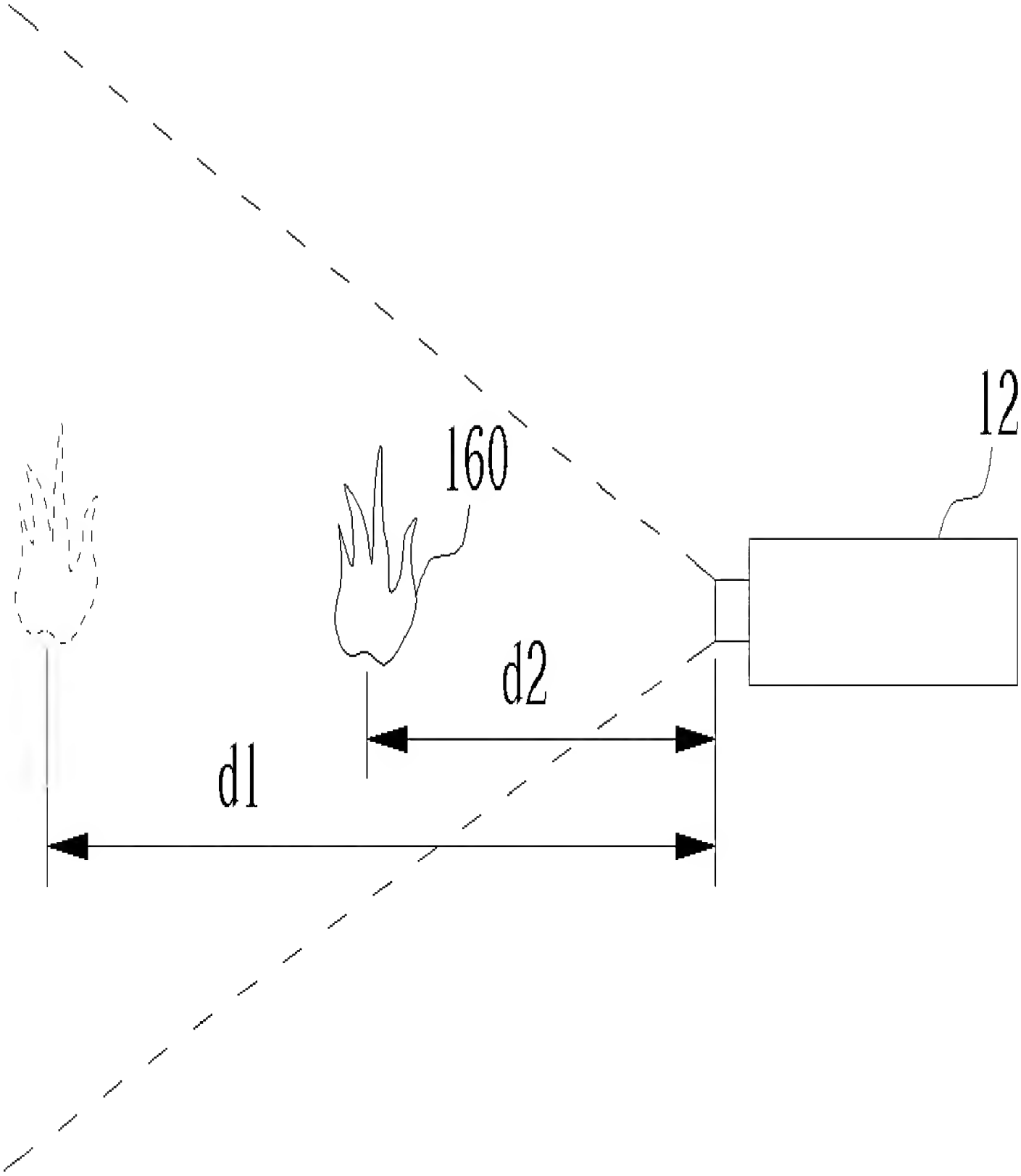

Fig. 41

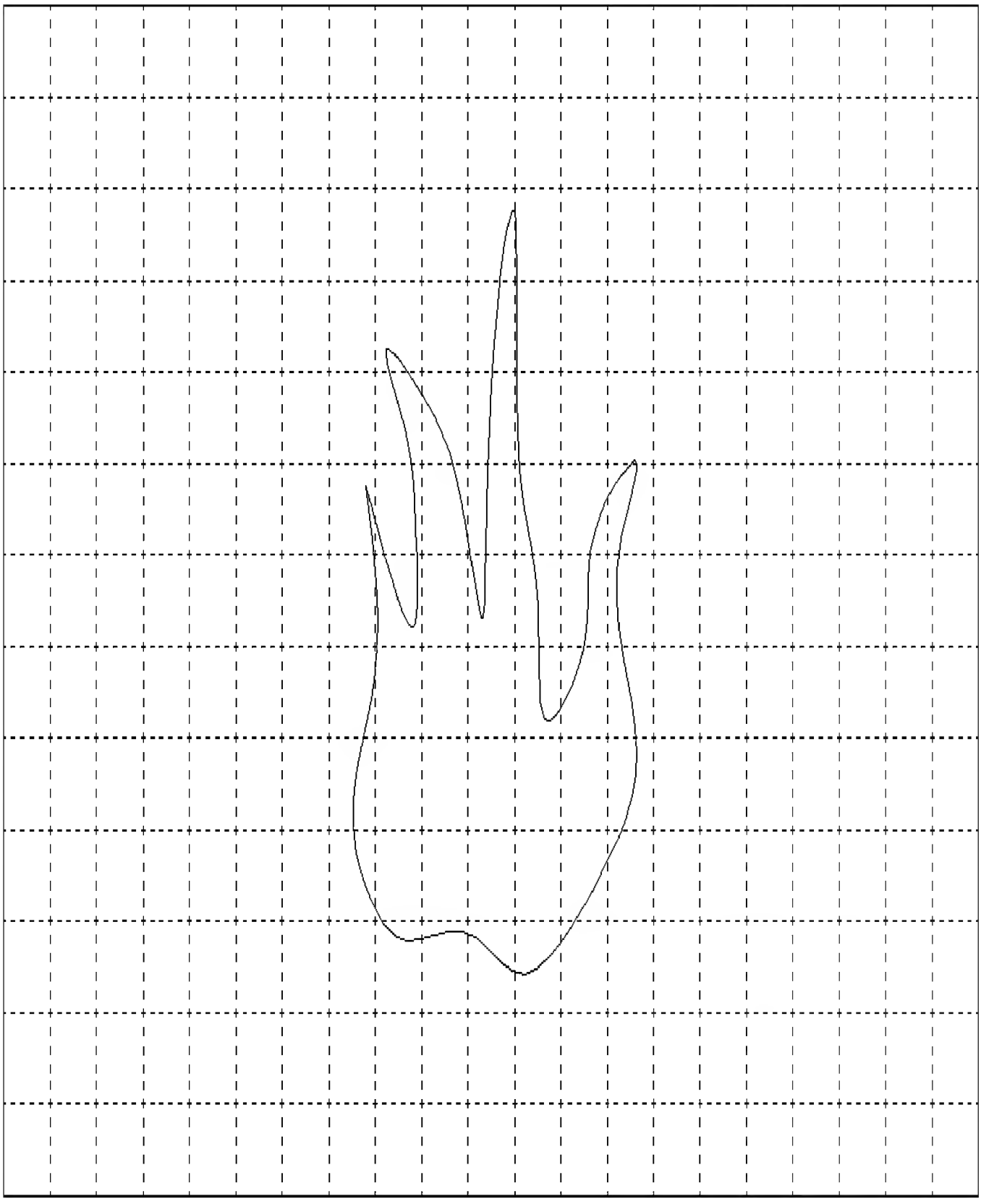

Fig. 42

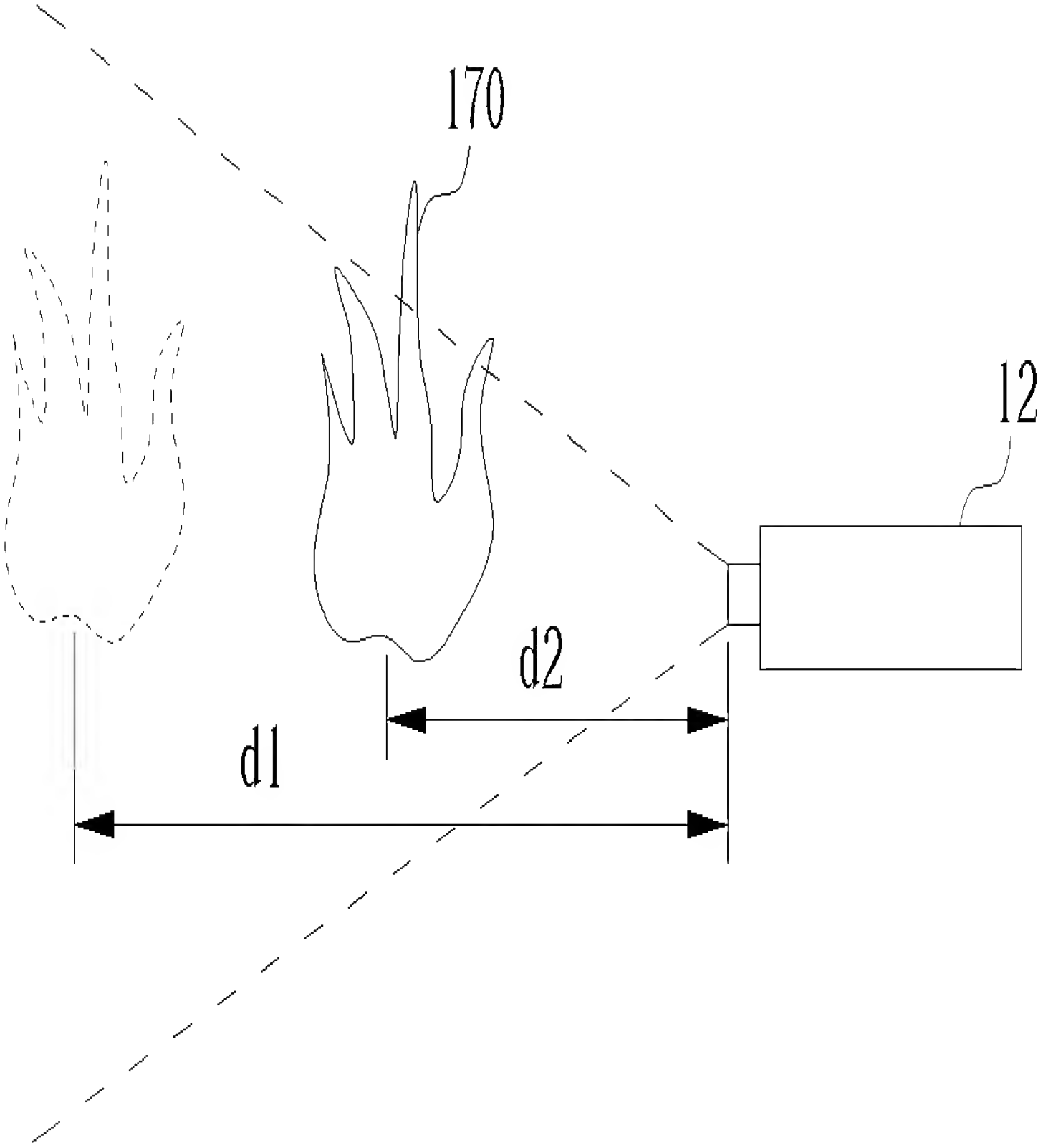

Fig. 43

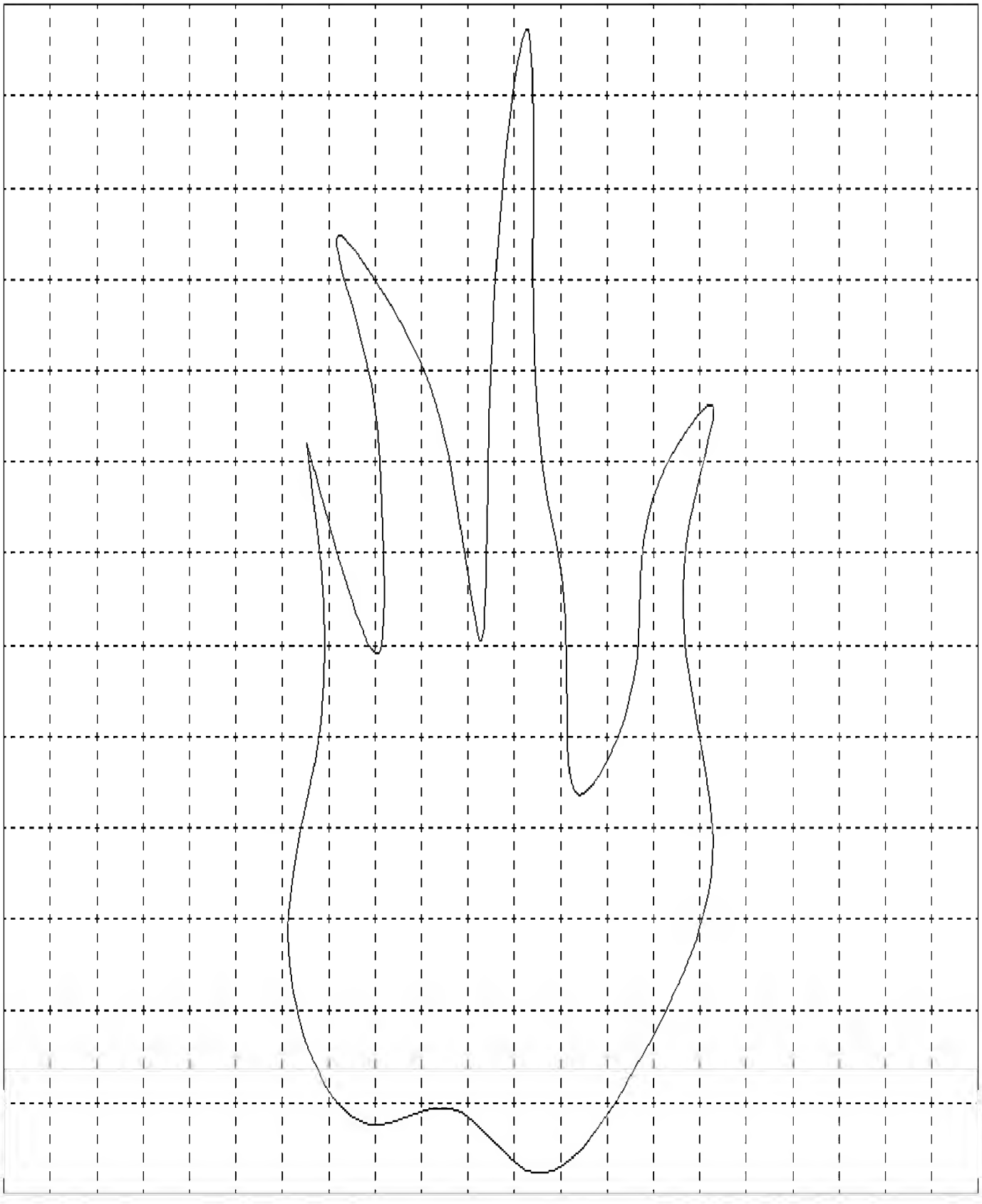

Fig. 44